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PAPER TRADE JOURNAL

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Pioneer Manufacturers of Electric Control Apparatus

1226 St. Paul Avenue Milwaukee, Wisconsin

CUTLER C-H HAMMER

Industrial Efficiency Depends on Electrical Control

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PAPER TRADE JOURNAL

ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-FIFTH YEAR

Published Every Thursday by the

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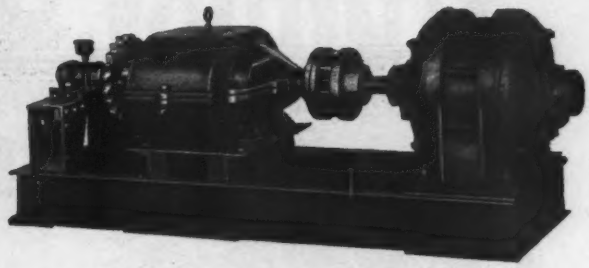
STILL GREATER EFFICIENCY



In the Improved Palmer-Bee Speed Reducer

The Palmer-Bee Mill Type Speed Reducer, recognized by thousands of users in every industrial field as the most efficient and dependable of all reduction drives, has been raised to a still higher standard of efficiency by the improvements recently added.

The fundamental principle of the Palmer-Bee, which years of gruelling service have proved to be correct, is left unchanged. But the following new features add materially to the ruggedness, oil-tightness and general all around efficiency of the machine:

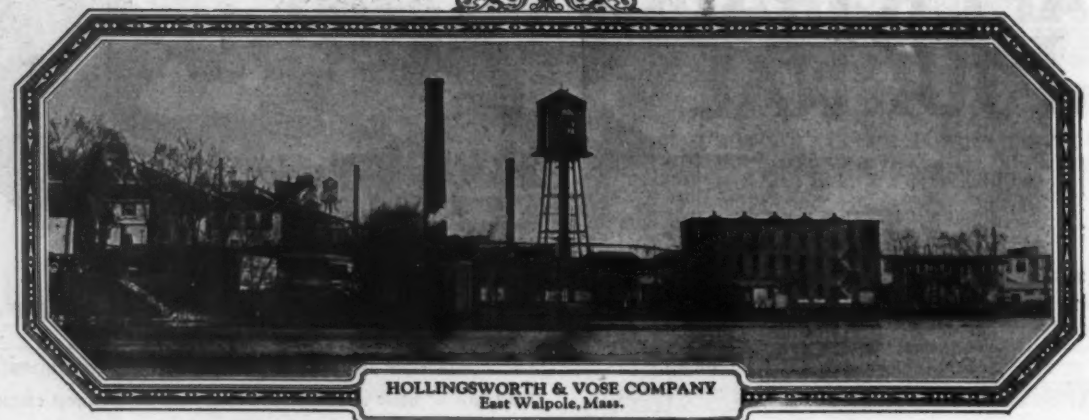
GEARS of forged steel or from electric steel castings.
PINIONS of high carbon steel—hardened.
BUSHINGS of phosphor bronze—interchangeable.
IMPROVED GROOVED JOINT assures absolute oil-tightness.
STEEL THRUST COLLAR—shrunk on drive shaft—automatically lubricated—protects gearing from external end thrust.

Let us send you Bulletin 445 which explains this unique reducer in detail, and a circular describing the latest improvements.

PALMER-BEE COMPANY
DETROIT - MICHIGAN

"World's Largest Producers Use P-B Reducers"

Improved
Palmer-Bee Speed Reducers
TRADE MILL REG. U.S. P-B MARK TYPE PAT. OFF.



One of the first mills in the country to use Liquid Chlorine

THIS old established mill, Hollingsworth & Vose Company at East Walpole, Massachusetts, was one of the first to recognize the advantages of Liquid Chlorine. Naturally, they turned to E B G for their installation.

E B G Liquid Chlorine is used by such leaders in the pulp and paper industry because it gives solutions of maximum efficiency, ease of control, and increase of bleach production.

Single-unit tank cars holding approximately 30,000 pounds, and multi-unit tank cars consisting of 15 one-ton containers, offer the large user of E B G Liquid Chlorine every possible advantage.

SINGLE-UNIT TANK CAR

MULTI-UNIT TANK CAR

E B G SERVICE

Includes abundant production facilities and container equipment, of course; expert engineering counsel in the use of Liquid Chlorine which would naturally be expected of the pioneer manufacturer. But beyond these a service which is much more comprehensive than the usual conception. Investigation will reveal the significance of this.

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Electro Bleaching Gas Co.

PIONEER MANUFACTURERS of LIQUID CHLORINE

Plant: NIAGARA FALLS, N.Y.

Main office 9 East 41st Street New York

ESTABLISHED IN 1872

PAPER TRADE JOURNAL

With Which Is Combined

PAPER

The Magazine of the Paper Industry

Vol. LXXXIV, No. 12 — Thursday, March 24, 1927

Southern Pulp and Naval Stores Co. Buys Mill

Exercises Option For Purchase of Sulphate Pulp Mill of the Atlantic Paper and Pulp Corp. of Port Wentworth, Ga., Which Has Been Idle For Some Years—According to Reports From Savannah the Change in Ownership May Lead to Important Paper and Pulp Mill Developments

The Southern Pulp and Naval Stores Company of Columbus, Ohio, has purchased the Atlantic Paper and Pulp Corporation, of Port Wentworth, Georgia, the Bank of America, 44 Wall Sreet, New York, announced on Saturday of last week. The price was not stated. Bankers said the new owners will build a kraft paper plant on the property which would give them an investment of about $500,000 there.

The Southern Pulp and Paper and Naval Stores Company obtained an option on the Atlantic plant during January, which it decided to exercise a few days ago. A contract of sales has been agreed upon and the transfer of the property will be made within a few days.

Plant Used for Experimental Purposes

The Atlantic Paper and Pulp Corporation whose sulphate pulp plant is at Port Wentworth, Ga., encountered financial trouble some years ago and the plant has been practically idle ever since. During the proceedings the first mortgage bonds were transferred to the Bank of America as trustee.

The plant about two years ago was partly leased to the Beaver Products Company for experimental purposes.

Lockwood's Directory of the Paper and Allied Trades gives the equipment of the plant at Port Wentworth, which is near Savannah, as four digesters, and three wet machines, the power as steam and electricity and the production as 120,000 pounds of sulphate fiber per 24 hours.

Officers of the Southern Pulp Co.

The Southern Pulp and Naval Stores Company, Inc., whose head offices are at Columbus, Ohio, recently started to build a sulphate pulp mill of 120,000 pounds per 24 hours at Dublin, Ga.

The officers of the company are C. M. Thorsen, president; E. H. French, vice-president and C. R. Templeton, treasurer.

Important Developments Expected

A press dispatch from Savannah under recent date says that "Definite promise of a large and important development along the waterfront of Savannah is seen in the securing of an option this week on the Port Wentworth plant of the old Atlantic Paper and Pulp Company.

"Since the successful completion of experiments last year by the Beaver Board Products Company there has been considerable interest in what would be used at the old plant. Northern and Western capital has become interested in a plan to develop the property on an extensive scale, not as a part of the Beaver Products Company, because that company now has a proposition pending before its board of directors to erect a plant on the east side of the city. Nothing definite has been announced in this regard, however. The new plant contemplated is thought to be connected with the paper pulp industry and to be one of much greater magnitude than any of its kind ever operated here.

"It is expected that those who hold the options will within a few days consummate the agreement for the modification or rebuilding of the plant. There have been several conjectures recently of some use being put to the site, one or two of which seemed very bright. It is believed in well informed circles that the times is ripe for a large and substantial improvement to be started on this location.

"Representatives of the bond holders of the plant who control the disposition of the property were not in Savannah yesterday, and confirmation of plans could not be added to by any statement of what was intended to be done. It is confidently believed, though, that the securing of the option and the interest which this Northern and Western capital has taken in the project, mean the consummation of the plans very soon.

The Beaver Board Products Company conducted a successful experiment last year in a new fiber pulp, the results being much more productive than was even anticipated. Having completed the experiment there was no need for any further use of the plant and it has been idle since.

"The area of the site is a large one and is capable of considerable development."

Refunding for Robert Gair

Refunding financing involving the issuance of $5,000,000 first mortgage 5½ per cent bonds is being arranged by the Robert Gair Company with a group of bankers. With the proceeds the company will retire an issue of $3,250,000 7 per cent bonds now outstanding and will complete payment for its recently acquired plant at Tonawanda, N. Y. The bonds will be offered this week by a syndicate including Edward B. Smith & Co., Hayden, Stone & Co., and the Old Colony Corporation.

With the completion of this financing the company will have outstanding $5,000,000 first mortgage 5½ per cent bonds, $3,480,000 7 per cent preferred stock and 467,132 shares of no-par common stock. Fixed assets are placed at $19,314,169.

The Robert Gair Company, founded in 1864, manufactures box board, folding box and shipping cases and produces approximately 18 per cent. of the paper box board consumed in the United States.

Paper Demand Fairly Active in Philadelphia

Orders For Fine Papers Mainly of Seasonal Nature and Confined to Immediate Needs—Wrapping and Other Grades of Coarse Specialties in Active Request—Pennsylvania Paper Mills Broaden Operations—Prices Maintained at Fall Levels

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., March 20, 1927.—With the turning point of the tide of the spring business due with the advent of St. Patrick's Day, the paper industry here began to spruce up. The past week was marked by a fairly active paper demand for all grades with coarse papers the leaders in the upward swing. There was not as lively a demand for fine papers, except those of seasonal requirements for the social stationery or greeting card trade, and announcement stocks that will be used by college and school graduates in the closing month of the present term. While the demand was but fair for actual deliveries there was a freer inquiry for future deliveries and for quotations on larger quantities than those that have been made in the past month.

Fine Papers in Fair Demand

Orders for fine papers are still confined to present moments needs, but are in larger quantities, indicating that the industrial world is becoming more active, despite the tendency to hold up sizable future deliveries. The greater volume of the fine paper sales are of a seasonal nature.

The growth of direct mail advertising aids in maintaining a market for announcement and novelty stocks of papers and covers in the printing industries and the newer shades of these grades of papers are finding a ready outlet among the allied trades engaged in this line of work. The spring displays of the clothing industries and the announcements of business developments coincident with the season have also been helpful in the disposition of papers adapted for current needs. Publishers and printers of the general commercial type have been showing signs of lively operations and their paper requirements have been proportionately larger. While an increased business has been indicated, there still is room for improvement before the normal spring market is resumed.

Mills Livelier

As the business of the distributors expands, the mills in the Pennsylvania territory broaden their operations. There is not a full time occupation of the employment forces, as many mills are awaiting the announcements of coal discounts which have already been forecasted by those engaged in bituminous mining. Dealers in the Quaker City have already informed their patrons that soft coal will be reduced on April 1, and this discounting of the fuel supply will aid materially in the economy of production. What effect the lower cost of fuel supplies will have upon the paper market remains to be seen. Pennsylvania manufacturers of book and coated papers last summer effected a lower price schedule on all their products and they are now selling below the values quoted in other manufacturing centers of these grades. It is not to be expected that a material reduction can be made before many months and not until supplies on hand in the mills will warrant such reductions. There is now no over-production in the mills, and prices have been maintained at the Fall levels, so that a steady market may be looked for, rather than a disturbed price situation.

Seasonal Demand For Wrappings

As springtime approaches, the seasonal activity for wrapping papers and other grades of coarse specialties assumes larger proportions. The clothing and mercantile industries, where the needs of the springtime are more urgent, are now stocking for an active season in the immediate future, but are not buying far in advance of the seasonal requirements. Easter specialties for the food and confectionery trades, too, are now being sought in larger volume. The clearing of the weather brings about a demand for building papers with plans for resumption of building operations throughout the summer. Bags have been less in demand, but prices are held firmly. The paper box manufacturers featuring high grade confectionery containers have been buying in greater quantity card boards and other paper boards used in the manufacture of these products, now being sought for the Easter trade.

Hammermill Distributors Entertain Printers

A closer acquaintance with the products of the Hammermill Paper Company, of Erie, Pa., and with the mill's method of producing these was developed as a result of the very successful meeting conducted by the local distributors last Tuesday at the Penn Athletic Club. Partaking of the nature of a social gathering with buffet refreshments, the assembly of paper men, printers and other allies in the consuming industries, brought together 500 associations in all branches of the graphic arts.

The Philadelphia distributors, Riegel & Co., Inc., 140 N. 6th street, with its sales staff, James McCracken acting as host; the D. L. Ward Company, with George W. Ward, W. Seary and William A. Hentz, extending the hospitality of the firm; the Thomas W. Price Company, Thomas W. Fort, Jr., and Norman Fort, and their associates Theodore Johnson and staff, all joined in providing a very interesting and informative meeting for their guests in the consuming trades.

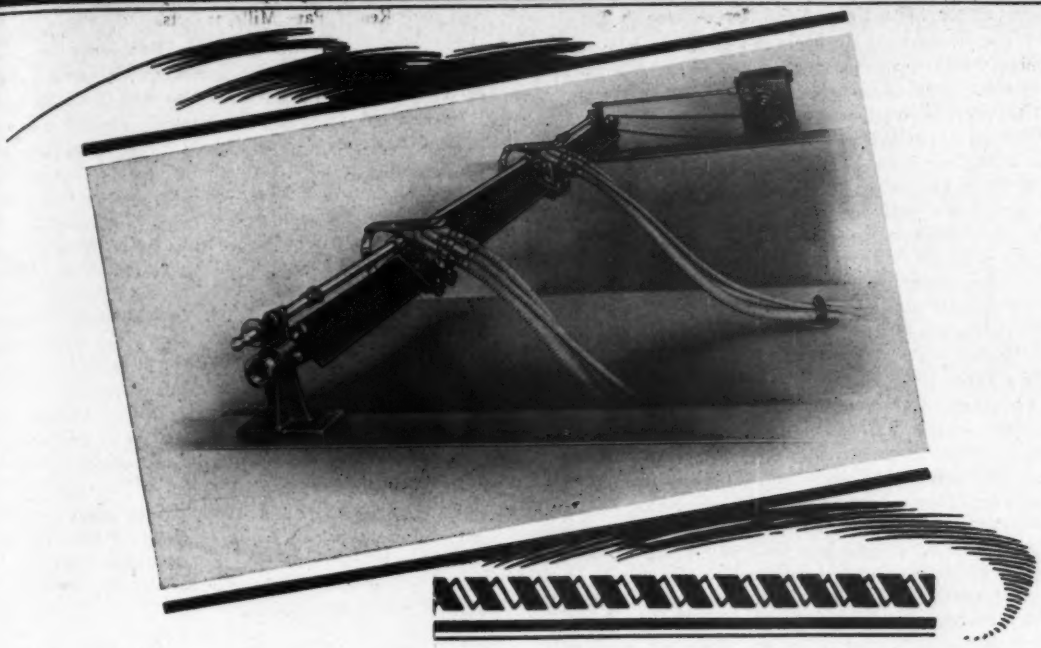
From the mill representatives, G. Washington Chabot, manager of distribution; Harrison Baldwin, sales manager, and A. E. Frampton, assistant advertising manager, the printers learned much useful information regarding Hammermill efforts to educate the public in the matter of better printing and the freer use of the printed word and message.

Distribution Manager Chabot gave an entertaining and instructive account of the Hammermill Paper Company's plans in national advertising so as to reach the public and promote the use of printing. He reviewed the advertisements that have appeared in the nationally circulated magazines such as *The Saturday Evening Post*, and told how he stressed the printing needs of the public rather than the sale of the Hammermill papers. This educational advertising campaign had greatly improved the demand for printing, he stated, and naturally the Hammermill papers were increased in sales, as a result of the fact that they stood back of the ad and were responsible for the propaganda.

Sales Manager Baldwin gave the history of the development of sulphite papers, stating that the Hammermill Company was the originator of sulphite writing papers based upon a wood pulp foundation. He told of the tremendous success which sulphite papers have had since the introduction of the first of these writing papers by the Hammermill Company.

Assistant Advertising Manager Frampton reviewed the manufacture of the Hammermill papers from the source of supply of the raw materials to the consumption of the finished grades by the public generally. He took his audience through the primeval Canadian forest reserves of the Hammermill Company, showed the hewing of the trees, the shipment of the logs to Erie Mills, then gave in detail stereopticon illustrations the phases of production carried on in the plant, explaining the process as each slide came to view.

He also showed the 26 printed forms at the disposal of the printers as standard guides for printed matter, explaining the free distribution of these to the associated industries upon request. He outlined the copy, types of forms in practical use for the printers,



The Value of Continuously Conditioned Felts

The experience of hundreds of paper makers throughout the world is the strongest endorsement of the principle of continuous conditioning on which the Vickery Felt Conditioner is based. This is evidenced by the fact that of the eight hundred Conditioners in service more than sixty per cent represent repeat orders.

Considering this, can you afford to deny your felts the benefit of continuous conditioning by means of the Vickery Felt Conditioner?

BIRD MACHINERY

649

BIRD MACHINE COMPANY, South Walpole, Massachusetts

cuts and type matter which was provided as part of the printers service supplied by the Hammermill Company to its consumers in the printing industries.

Paper Men Unite With Typothetae

Paper Trade Association members who are associated with the Philadelphia Typothetae will meet their allies in the printing trades at the social gathering to be held tomorrow evening at the Elks Club. The Paper Trades Division is under the chairmanship of W. W. Wilcox, of the Wilcox, Walter Furlong Company. The object of the meeting is to bring paper men and printers in closer touch with the activities of the Typothetae for the purpose of promoting the membership campaign now in force under the direction of W. A. Meeks, manager director of the master printers organization. Charles R. Wier, president of the Direct Mail Advertising Association, will be the speaker. Mr. Weir is also director of the Graphics Arts Exhibit, on permanent display in the D. L. Ward Company, fine paper dealers. He comes to Philadelphia twice monthly to direct the exhibits.

New Lines Promoted by Thomas S. Royal Co.

Having very successfully launched the Non Sift Bags which have been developed to meet the Interstate Commerce Commission requirements for shipping various products, the Thomas M. Royal Company is now devoting efforts to the sales of flour sacks that will permit of shipments without loss of ingredients in transit. The Royal Company is one of the largest of eastern bag manufacturers and operates a mammoth plant at Grange avenue and 7th street, where are produced a complete line of bags and an extensive assortment of coffee bags in color work and many designs. The Non Sift Bags are designed in multi-walled uppers, with staple bottom, which prevents sifting. They are made in all sizes. The flour sacks will be constructed along the same lines. Vice-President Gordon H. Friend has been concentrating on the development of the field for flour sacks among the mills of the country. Much new equipment has been added to the plant to take care of increased business.

Huff Paper Co. Makes Progress

Since adding the new Sisal kraft papers for building purposes, the Huff Paper Company, Denckla Building, is adding many patrons to its list among the building trades. The new Sisal krafts are reinforced with sisal centers and used extensively by builders for sheathing purposes because of their strength and durability. They are made by the American Reinforced Paper Company, of Massachusetts.

Scott Paper Co. Elects Officers

The vacancy made in the presidency of the Scott Paper Company, of Chester, Pa., through the death of the late Arthur H. Scott, was filled at the election of officers held last week. Owen Moon, its former vice president, was elected to succeed Mr. Scott. Other officers elected are: 1st vice president, J. G. Lamb; 2nd vice president and secretary, T. B. McCabe; and 3rd vice president and treasurer, E. S. Wagner. President Moon has been associated with the company since 1899. For the past decade he has been a vice president. He is owner of a newspaper in Winston-Salem, N. C., and was formerly owner of the *Trenton Times*. E. I. Scott, veteran founder of the Scott Paper Company, and father of the late president, Arthur H. Scott, continues on the board of directors, although retired from active participation in the firm's affairs, apart from its directorate.

N. A. Considine Back From Cuba

President Norbert A. Considine, of the Paper House of Pennsylvania, who has been visiting the offices of the Considine Importing Company in Havana, Cuba, returned to his desk last Monday at headquarters here. He has been looking after the Considine Importing Company's business in the Cuban Isles for the past fortnight. Vice President Raymond J. Considine has been confined to his home for a week with an attack of influenza and is now reported on the road to convalescence. Al Dubey, sales manager of the Reading Paper Mills, Reading, Pa., and Mill Manager Harold E. Walker, called on the Paper House of Pennsylvania during the week. The Paper House of Pennsylvania and the Lindsay Paper Company are the local distributors of the Reading Paper Mills products.

Anthony Richie Recovered

Following a month's confinement to his home, suffering from an inflammation to the nerves of the face, Anthony Richie, of the Richie-Howarth Company, 804 Sansom street, is again able to be at his desk. He has been spending a few hours daily at the office and is gradually improving so that he will soon be able to give his entire time to his duties as a local distributor of the Eagle A papers of the American Writing Paper Company. The Richie-Howarth Company is sole Quaker City paper dealer featuring a single paper manufacturer's products exclusively. The firm concentrates on the Eagle A papers. It recently took larger quarters in the Sansom street building for the purpose of extending its warehousing facilities and sales offices, occupying the first and fifth floors of the Lindsay Building.

S. S. Garrett Adds Salesman

The sales staff of S. S. Garrett, one of Philadelphia's oldest and best known coarse paper houses, 259 S. 3rd street, has been augmented by the addition of George Crosdale, who will take care of the Philadelphia territory.

Carroll S. Weir Passes Away

Word was received in Philadelphia last Friday of the death of on the preceding day of Carroll S. Weir, in Erie, Pa., a former secretary and director of the Hammermill Paper Company, of that city. He was 64 years of age.

Financing for Northwestern Pulp Co.

[FROM OUR REGULAR CORRESPONDENT]

PORTLAND, Ore., March 17, 1927.—The Northwestern Pulp and Paper Company, which has started preliminary construction work on a large plant at Astoria for the manufacture of sulphite paper pulp, has announced its plans for completing financing of the company. This is to be accomplished through the sale of $1,000,000 of bonds and $500,000 of cumulative preferred stock carrying common shares as a bonus. The company has opened financial offices in Portland and will handle its own securities.

The bonds, offered at par, are 6½ per cent sinking fund, first mortgage obligations, due March 1, 1947. They will be issued in denominations of $1,000, $500 and $100. The trust indenture provides that for every cord of pulpwood cut from lands of the company the sum of $1 is to be placed in cash in the sinking fund. The bonds are to be retired at the rate of $50,000 a year, beginning December 1, 1929.

Offering is being made at this time of 5,000 of the authorized 20,000 shares of 7½ per cent cumulative preferred stock, par value $100, priced at par. Each share of preferred carries a share of common as a bonus. The preferred is redeemable on 60 days' notice at 105. It has preference over the common stock both as to assets and dividends. The company pledges to set aside, beginning with 1930, at least $52,500 annually for redemption of these shares. No dividends are to be paid on the common until this provision is met.

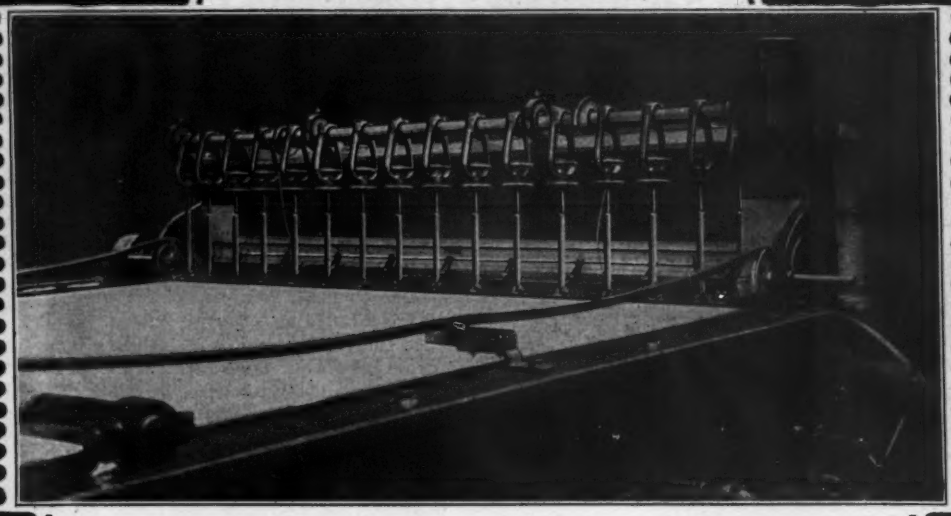
It is stated that production of the company, estimated at more than 30,000 tons of sulphite pulp per year, has been placed under favorable contracts in the east. Annual net earnings are estimated at no less than $580,000, which would provide for all charges, redemption features and dividends and leave a surplus of $92,500. Tangible assets, at completion of the financing, are given a value of $3,745,000, with prospective working capital of $400,000.

Paper Index Price Lower

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., March 22, 1927.—February wholesale price index for paper and pulp was 154.8 compared with the same percentage for January and 187.8 for February of last year, taking 1913 at 100 per cent, according to the Department of Commerce.

Invest in a Voith Inlet



Paper of Uniform Caliper Not a Problem with Voith Inlet

The Voith Inlet gives you accurate control over the stock as it flows onto the Fourdrinier wire. It is easy to make a sheet of uniform thickness across the entire width of the wire, avoiding thin edges next to the deckle and at the same time, the Inlet helps to eliminate lumps and foam spots. The stock stream can be regulated either as a whole across the full width of the sheet or locally at any point. Proper adjustments are easily made while the machine is running. These minute adjustments enable the machine tender to produce a sheet of uniform thickness with a minimum of effort and without the troublesome and old fashioned slices. Information concerning the many other advantages of the Voith Inlet will be forwarded to you on request. Write today.

VALLEY IRON WORKS CO.

APPLETON, WISCONSIN

New York Office 350 Madison Avenue

Canadian News Print Sales Forces May Merge

Leading Manufacturers Reported To Be Contemplating Consolidation of Selling Efforts—Decline in Ratio of Production to Capacity Regarded in Some Quarters as Fore-Runner of Over-Production of News Print—Car Loadings Fall Off

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., March 21, 1927.—The progressive decline in the ratio of news print output to capacity is regarded here as the forerunner of a serious over-production, and additional anxiety is shown over railway returns, which indicate a large falling off in news print car loadings since the beginning of February. This is hard to explain, seeing that the output is still ahead of that of last year as regards actual volume. Meanwhile new machines are coming into production, and it is estimated by those competent to judge that the capacity of Canadian mills will be 1,500 tons per day in excess of demand by August next.

Meanwhile there is talk of a gigantic merger of the sales organizations of leading news print manufacturers. It is said that almost 50 per cent of the Canadian news print industry may shortly consolidate its sales efforts into one organization.

Fair Wage Clause in Pulp Wood Lease

The first instance in which what is known as "the fair wages policy" has been applied to the administration of Crown lands in Canada has just occurred. The Order in Council extending the areas in northern Manitoba within which the Manitoba Paper Company may cut pulp wood for use in its pulp and paper mills at Pine Falls, contains the following provision:

"That the company shall pay to those employed in the industry wage rates not less than those which are generally accepted as current in each trade or occupation in similar industries, and shall maintain conditions of labor not less favorable than those prevailing in similar industries in the district."

To Make Paper Mill Equipment

Having recently completed the amalgamation of its financial resources with the Collingwood Shipbuilding Company, the Port Arthur Shipbuilding Company is now ready to proceed with its program of development and to specialize in the manufacture of pulp and paper machinery, in the making of commercial and heating boilers, etc.

In return for a fixed assessment privilege, the Port Arthur Shipbuilding Company guarantees to spend $300,000 in new development work and guarantee an annual payroll of $200,000.

Port Alfred Pulp Co.'s Annual Statement

The third annual report of the Port Alfred Pulp and Paper Corporation, now in the hands of the shareholders, shows that with the company's production of news print for the year ended December 31, 1926, less than the capacity of one machine as compared with four machines now in operation it was still able to show $2.30 per share earned on the 120,000 shares of no-par-value common stock after liberal allowances for depreciation and depletion.

Gross operating profit for the year amounted to $1,260,929 as compared with $921,935. General and administrative expenses required the sum of $119,989. Interest required $381,825, while the sum of $260,363 was written off for depreciation and depletion. These deductions left a balance of $498,751 available for dividends. After payment of preferred dividends amounting to $222,121 there remained available for the common the sum of $276,629.

The completion during the year of the four news print machines, the acquisition of important new timber resources and the expansion of the sulphite plant brought the property account up to $27,515.237 from $8,951,881. Total assets are shown at $30,764,326 as compared with $12,014,883.

Canadian Granite Press Rolls

Previous to the year 1923 all of the granite bodies for press rolls used in Canadian paper mills were imported, some from Vermont and others from Aberdeen, Scotland. A study of the available granites in Canada showed that several of the Canadian deposits contained stone of superior grade capable of being quarried in block of sufficient size for the purpose required, and press rolls are now being made in Canada.

The most notable quarry producing granite for press rolls in Canada is situated at Guenette, Quebec, 16 miles south of Mont Laurier, Que., and approximately 100 miles northwest of Montreal. This rock is known to the trade as "Canadian Pink." The stone is of fine grain and light reddish in color; the quartz grains are usually not more than a millimeter across. The feldspar is fairly fresh and in consequence the rock is able to withstand well the action of chemicals in the paper stock.

The granite bodies are not finished at the quarry but are shipped to Iberville, Que., where they are turned down to within approximately ⅛ inch of the finished size and bored out to receive the shaft for the roll. They are then sent to Montreal, where they are fitted with forged steel heads and journals which are attached by means of a thorough-going steel shaft, shrunk into place. The face of the roll is finally ground to the required size and the roll is then ready for the paper machine. Granite press rolls have been made 18 inches up to 30 inches in diameter and from 7 feet 6 inches up to 22 feet 10 inches in length.

During the past six years approximately 200 granite press rolls from "Canadian Pink" granite have been furnished to paper mills.

Brown Corporation's New Reserves

It is understood that the Brown Corporation will retain the Cap Magdalen timber limits which it recently purchased as a forest reserve. The pulp mill on the property will not be opened and timber may, perhaps, be shipped from the limits to the New Hampshire mills, which are owned by the parent U. S. company. Ultimately, the Brown Corporation may erect a news print mill on the Cap Magdalen limits. They are situated in Gaspe.

To Sell Output of Northwestern Pulp Co.

PORTLAND, Ore., March 17, 1927.—The Northwestern Pulp and Paper Company, which recently incorporated and started construction plans for a large plant at Astoria, Ore., has announced that the entire output of the plant for the first ten years has been contracted for by the Pulp and Paper Trading Company of New York.

The board of directors of 15 business men of New York, Portland and Astoria will control the business. They follow:

Charles R. Flint, New York, chairman; Myron W. Robinson, New York; G. Clyde Fulton, Astoria; Frank Patton, Astoria; A. V. Allen, Astoria; B. T. McBain, Astoria; W. M. Macphail, Portland; Amedee M. Smith, Portland; C. W. King, New York; Archimedes J. James, New York; Daniel Mungal, New York; Robert T. Jacob, Portland; Charles W. Miller, Portland; S. C. Maltby, San Francisco, and R. C. Wechsler, New York.

Charles R. Flint is president of the company and chairman of the board; A. V. Allen, pulp specialist, is vice-president; G. Clyde Fulton, Astoria, secretary, and Samuel Connelly, of Portland, treasurer.

Seaman Paper Co. in New Quarters

CHICAGO, March 21, 1927.—The Seaman Paper Company has issued an announcement stating that the general offices and all departments of the Seaman Paper Company will be located at 411 West Ontario street, Chicago, after March 19.

Another New Saniseal!

THERE are two kinds of Saniseals, giving *double* opportunity to Smith-Lewis jobbers.

The "regular," unprinted Saniseals are wound in spirals. Half-pints, pints, quarts, gallons, squat pints, squat quarts. They are used in large quantities for the delivery of liquid or moist food, such as ice cream, oysters, cottage cheese, delicatessen, syrup, coffee, soup, molasses, butter, lard, hamburger, salads, cream, milk, fountain drinks, etc.

The "special" Saniseals are made with the same patented *moulded* closure, but the side walls are *convolute*-wound. The outer ply is printed before the can is made. Any combination of colors and design within the size limits may be used. Our process results in cans of unequalled beauty and attractiveness, at prices that have already resulted in the adoption of Saniseals by some of the largest food manufacturers in the United States.

As a stock proposition we carry "special" Saniseals already printed for ice cream, cottage cheese and other trades, so that dealers can buy them economically in small quantities. Above is shown our new peanut butter can. There are many packers in your territory who will be glad to get these substantial, handsome and inexpensive containers.

The Saniseal double line brings double opportunity for Saniseal jobbers. Write us for samples and details of our jobber plan.

SMITH-LEWIS FIBRE CAN CORPORATION
759 BOSTWICK ST., LOWVILLE, N. Y.

NEW YORK BOSTON BALTIMORE CINCINNATI

SANI SEAL

Sanitary fibre containers for liquid, moist or dry products

Demand for Paper Still Below Normal in Chicago

While March Returns Are Behind the Corresponding Month Last Year, Business Is Expected to Begin to Expand With the Advent of April — Request for Wrapping Paper Lighter Than for Some Time Past—Slump in Waste Paper Industry Continues

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., March 21, 1927.—General business in the Chicago paper markets is slow and characterized by extreme conservativeness and rigid application of the hand-to-mouth method of buying. The warm spring days that have been in vogue during the past three weeks have not brought forth any appreciable increase in business and the spring order trade is still conspicuous by its absence. In a number of cases paper houses in different grades report that March is behind last year but that the market is steady and that an increase in business is expected by the first of April. The fact that business is picking up in nearly every other line of business, and that the steel market, an unfailing barometer, is stronger, leads paper men to believe that the present slump will be discounted in the near future.

There are current reports that wrapping paper is rather quiet, in fact more so than for some time previous, but the market seems steady and wrapping paper merchants believe that lower prices, unless based on lower cost of production, would not do anything to improve business. The lull is considered temporary and if this is the case better business can be looked for in April.

Old paper is still experiencing a genuine slump in the market that will not be remedied for some time. It is expected in certain quarters that the market may even go lower with April's quotations. Dealers point to the fact, however, that the old paper market seems even a bit worse in New York.

Fine Paper Prices Stable

Fine printing papers and book and cover paper continue to experience a rather quiet period but prices are stable, although a little lower than necessary for a good margin of profit. Some dealers in this grade of paper believe that the fault of low prices lies more with the fact that there are far too many printing presses than with any other cause. The great number of presses makes competition very keen among printers and, in view of the fact that there are more presses reported than can take care of business at its top peak, there are always some that remain idle. This affects the price situation immediately and then reflects on the mills themselves.

How quickly this can bring inopportune results is borne out by the experience, related by a Chicago dealer in fine printing papers, of a salesman who, inadventently, told a buyer that a number of his employees presses were idle. The executive immediately told his advertising man to squeeze this particular printer's representative because "their presses were partly idle and they needed the business." The advertising man did this and the printer had to come down in price. To make any profit at all they had to buy at a lower price from the mill. Thus, the paper dealer interviewed reports that too many printing presses may be partly at fault for low prices in that grade of paper.

Association Label Adopted

The Chicago Paper Association has permanently adopted a label that is attached to all invoices guaranteeing the merchandise as being of full size, full count and full weight, and of the quality specified when the purchase is made. This guarantee is backed by a bond taken out with the Fidelity and Deposit Company, of Baltimore, Md. It is the intention of the Chicago Paper Association to advertise this label in all publications that reach the consumer of paper as well as through an extensive direct by mail campaign, with a view to stamping out any sharp practices that might exist in the Chicago market.

The Chicago Paper Association has also recently appointed a new committee to be known as the Mill Relations Committee. Charles Harder, of the F. C. Traver Paper Company, is chairman. It is the duty of the committee to give and to ask all of and for cooperation necessary to make business transactions between members of the Chicago Paper Association and the mills with whom they do business satisfactory to all concerned. The committee is particularly anxious to be of any service to any manufacturer who feels that any unjust claim has been made against him by any paper manufacturer who is a member of the Chicago Paper Association.

New Line for Ben Franklin Co.

The Ben Franklin Paper Company is soon to add an exceptional line of book paper of very good value to be known as the McIver Plate Finish. The Ben Franklin Paper Company has been developing the new grade for the last few months and all tests that it has been subjected to bear out the fact that it will be exceptional for fine half tone printing and color work. All trial specimens produce a very satisfactory result. The new product will be on the market in a short time.

Miscellaneous Trade Notes

J. R. "Jack" Robinson, who has been connected with the Butler Paper Corporation for the last eight years, will assume the duties of general sales manager of the Rex Paper Company, Kalamazoo, Mich., March 31. Mr. Robinson made a survey in South America for the Butler Paper Corporation during the first period of his service with that organization. Later he was connected with both the Detroit and New York offices of the Butler Paper Corporation.

L. C. Ferris, formerly in the mill department of the Butler Paper Corporation, is now employed as a salesman by the Patten Paper Company, Ltd.

Mr. and Mrs. W. E. Dwight will return to Chicago April 1st after a four months' stay at their winter home in Naples, Florida. Mr. Dwight is president of Dwight Brothers Paper Company, Chicago.

Colter Rule, vice president of Dwight Brothers, was called to Cincinnati recently on account of the serious illness of his mother. Mr. Rule returned to Chicago March 17 and reported that his mother's health was much improved.

Alexander Thomson, vice president of the Champion Coated Paper Company, Hamilton, Ohio, is having a delightful four months' trip abroad and is now reported as being in the Holy Land.

E. R. Jones, well known paper man of the Kansas City Paper House, Kansas City, Mo., is expected home early in April from an extended trip around the world.

James E. Smeed, vice president of the Sioux Falls Paper Company, Sioux Falls, South Dakota, was in Chicago a couple of days this week.

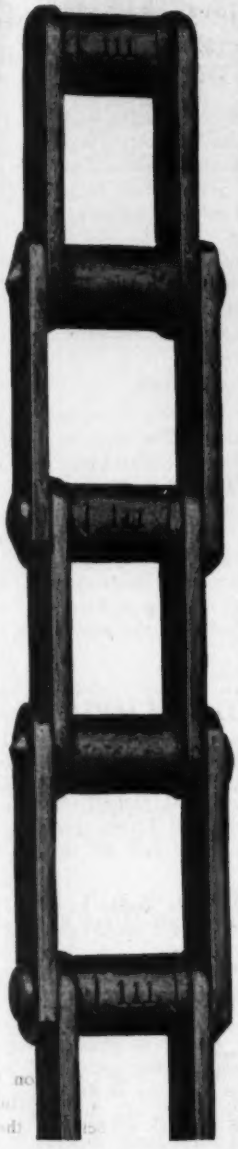
W. E. Van Horne, of the Champion Coated Paper Company, was in Chicago during the past week and visited at the Chicago office of his organization located in the Conway building.

A. W. Nason, for a number of years a salesman of Albany Felts, is now connected with the Ben Franklin Paper Company, fine printing and book paper house, as Chicago salesman. Mr. Nason is well known in the paper trade and his connections with the makers of Albany felts have afforded him intimate contact with a large number of mills throughout the United States.

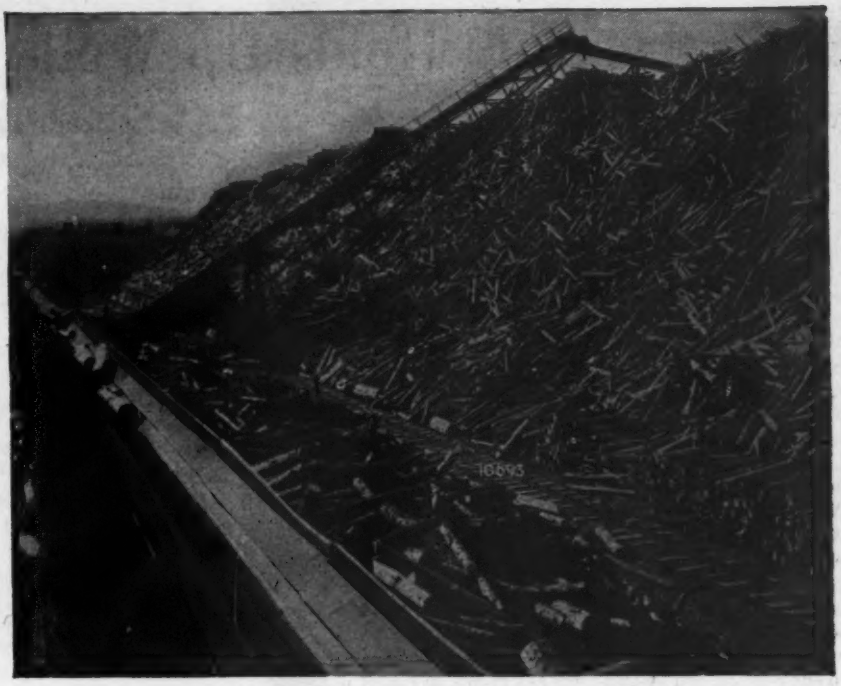
Chicago paper men are still enjoying their vacations in various

(*Continued on page 28*)

Jeffrey Chains for Every Service



Jeffrey Hercules Chain for drives and rough service handling pulpwood, coal, etc.



Building the Long Pile

A Jeffrey Portable Stacker travels the entire length of your available storage space and costs much less than an overhead conveyor.

Both your piling and reclaiming equipment can be portable units, the only long span being the comparatively inexpensive steel cable conveyor running in a wooden trough.

Two men operate the equipment.

In this photograph the Jeffrey Cable Conveyor is feeding the logs to the foot of the stacker. A Jeffrey Portable Conveyor is used for reclaiming.

Jeffrey Stackers are built to specifications, according to your ground area and mill capacity.

The Jeffrey Manufacturing Company

931-99 North Fourth St., Columbus, Ohio

New York	Rochester, N. Y.	Pittsburgh	Boston	Cleveland
Buffalo	Philadelphia	Scranton, Pa.	Cincinnati	Detroit
Chicago	Milwaukee	Denver	Los Angeles	Charlotte, N. C.
Charleston, W. Va.	St. Louis	Salt Lake City	Birmingham	Montreal

50 YEARS OF SERVICE TO INDUSTRY

JEFFREY

MATERIAL HANDLING EQUIPMENT

Jeffrey Products

Elevators
Conveyors
Portable Loaders
Pulpwood Stackers
Coal and Ashes Handling Equipment
Skip Hoists
Chains and Attachments
Sprocket Wheels—Gears
Crushers—Pulverizers
Sand and Gravel Handling, Washing and Screening Equipment
Locomotives
Ventilation Fans

Paper Demand Holds Up Well in Los Angeles

Paper Merchants Report That the Request For Paper Is More Satisfactory Than at the Corresponding Time Last Year—Pacific Coast Paper Box Manufacturers Association To Meet in Del Monte June 27-28—Angelus Paper Box Co. To Expand

[FROM OUR REGULAR CORRESPONDENT]

LOS ANGELES, Cal., March 17, 1927.—Trade volume, according to the statements of Los Angeles general paper merchants, is holding up fairly well and is better than it was for a corresponding period of last year. In fact, following the post-holiday slump, which was experienced during the first fortnight of January, trade has been up to the expectations of the jobbers and in some instances and on some lines has exceeded what was expected.

Collections remain slow but are not alarmingly so, most collection departments saying that some money is coming in all of the time and that by keeping close vigilance upon debtors none of the outstanding accounts are getting into very bad shape.

With the rainfall far in excess to date of anything Southern California has seen for several years past, there is no reason why trade should not be good and should not continue good throughout the remainder of the year. Water is the life of this far western country and when there is plenty of it in reserve, as there is this year, trade in practically all lines continues good. It happens that the paper trade has gotten pretty well out of the seasonal manner of doing business and instead there has grown up a hand to mouth buying custom among paper consumers which makes for a more stable state of trade throughout the year than used to pertain.

Paper Box Men To Meet

The Pacific Coast Paper Box Manufacturing Association will meet in annual convention at Del Monte, Cal., on June 27, 28 and 29. Inasmuch as Del Monte ranks as one of the most attractive of the many show places in California, and as everybody wants to go there at least once every year, it is hoped and expected that there will be a large attendance at this year's convention. In addition to the members being present it is hoped also to attract a representative attendance from among the supply men. Measures now are being taken by the membership committee to invite as many of them as possible to come.

The arrangement for the program is in the capable hands of Charles Ruble, of the Standard Paper Box Company, Los Angeles, and of Richard Graham, sales manager for the Los Angeles branch of the Paraffine Company. Mr. Ruble says an attractive and instructive program is being arranged and that he will be in a position to announce it sometime within the next thirty days. Also the entertainment committee is hard at work arranging for the entertainment features which will make the event notable and the committee promises something novel and especially enjoyable.

Angelus Paper Box Co. To Build

Some time ago the PAPER TRADE JOURNAL announced that the Angelus Paper Box Company, of Los Angeles, was contemplating the erection of a new building for the purpose of introducing the manufacture of corrugated containers and shipping containers, which would constitute an expansion of the business of this company, which hitherto has confined its operations to the production of set-up and folding paper boxes.

A. E. Stein, president of the company, announces that the erection contract has been awarded and that work will start in the very near future. It is planned to erect a three-story brick building, 100 x 150 feet, on East 61st street. The old plant of the company, located on North Broadway, will continue to turn out set-up and folding paper boxes.

The Angelus Paper Box Company is one of the oldest of the paper box manufacturing concerns in Los Angeles and is one of the largest. It was started in 1912 with only six employees. It now employs 150, and, when the new factory is completed and equipped, it will employ many more. The machinery which will be installed in the new plant has been bought in the East and is now enroute for Los Angeles. Some idea of the present magnitude of the business done by this concern may be gained by the statement that nine printing presses are required to print the boxes turned out every day, and that at certain seasons of the year these work through two shifts at least.

The company covers all of Southern California with its selling operations and also has an extensive trade in the Hawaiian Islands.

The new building will cost approximately $95,000, and when equipped with the necessary machinery will represent a total investment of nearly $150,000.

General Trade News

The California Bag and Paper Company is expanding its business and is installing new machinery. The latest installation is a battery of Webber self opening bag machines which now are enroute from the American Lakes Paper Company, of Chicago.

George Olmsted, vice president of the S. T. Warren Company, is making a business trip west and is calling upon the trade connections of his house in Los Angeles.

Harrison Baldwin, the newly appointed sales manager for the Hammermill Paper Company, is spending a time in Southern California and is getting acquainted with the paper trade in this section of the country.

PAPER DEMAND IN CHICAGO

(*Continued from page 26*)

parts of the globe and the latest to leave the city are Ray Russell of the Marathon Paper Company and H. B. Hobart of the Barton-Hobart Company. Both of these well known paper men are enjoying their vacations in Cuba. The date for their return is not definitely decided on.

N. A. Altman and L. E. Moeller, of the J. W. Butler Paper Company have been visiting mills in the Miami Valley during the past week.

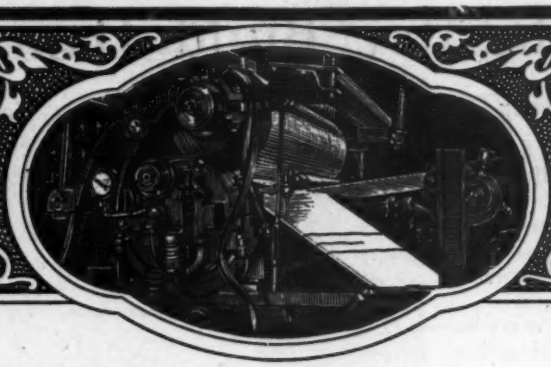
Albert S. Harmon, of the Pilcher-Hamilton Paper Company, accompanied by his wife, is enjoying a month's vacation in California.

N. A. Schoenbrucker, recently elected assistant secretary of the National Paper Trade Association, has not yet arrived in Chicago, although he is expected at any time at the offices of the Association in the Conway Building. In the meantime C. K. Higgins is still acting as secretary, while busily engaged in establishing his new lines of Sisalkraft and Fibreen, products of the American Reenforced Paper Company. Mr. Higgins reports that Sisalkraft is enjoying a splendid reception. Its qualities of strength, waterproof construction, and its adaptabilities to so many uses are making it very popular for building owners, architects and builders and wherever building paper is used.

To Handle Paper Mill Supplies

[FROM OUR REGULAR CORRESPONDENT]

FORT EDWARD, N. Y., March 21, 1927.—C. R. Duers Electrical Mill Supply Corporation has filed incorporation papers with the Secretary of State at Albany to handle a complete line of mill supplies. The capital is $15,000 and directors are William H. Hill, of Fort Edward, L. A. Waite, of Saratoga Springs, and C. R. Duers, of Glens Falls. The company will maintain a warehouse and salesroom in Fort Edward and will cater especially to paper mills in the Upper Hudson district.



There's as much fluctuation as 20%

IT has been found by close observation that the performance of the felt can affect the consumption of steam as much as 20%.

And it takes a huge coal pile to produce 20% of the steam in the average paper mill.

Consequently, if felts can make such a difference, it's only good business to have the best felt you can get, not alone in quality of materials, but in the way it fits your individual machine needs.

You want to call in a Hamilton Felt Man. In the first place, he's a practical felt man. He knows felts, what they should do on a particular machine, and how to specify them so that they do it.

In the second place, he represents a felt manufacturer who has more than three generations of experience behind him—experience that decides the mixture of the wool, the strength and thickness of the threads, and the design of the warp and woof.

It only takes a single Hamilton Felt to demonstrate to you that there are felts and felts.

Ask the Hamilton Felt Man the next time he calls.
He'll give you a felt that fits your individual needs.

Shuler & Benninghofen, Hamilton, Ohio

The Miami Woolen Mills - Founded 1858.

Hamilton Felts

Mill Interests May Build Dam At Peshtigo

Chalk Hills Power Dam Being Constructed by Northern Electric Co. Subsidiary of Northern Paper Mills, Green Bay, Wis., Will Be Completed in April—Leonard Griffith Dies From Burn Suffered When Pipe Bursts at Consolidated Water Power & Paper Co.

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., March 21, 1927.—Rumors are current that paper mill or power interests are about to construct a huge power dam on the Peshtigo river near Peshtigo, Wis. Survivors have been working in that vicinity for several weeks but nothing has been revealed as to who those interested in the project might be.

The point at which the survey is being made is between Roaring Rapids and Crivitz, where the largest dam on the river will be possible of construction. It is said that a dam in that location will back the water up the river for six miles.

Chalk Hills Power Dam Finished

April will see the completion of the new Chalk Hills power dam of the Northern Electric Company, subsidiary of the Northern Paper Mills, Green Bay, Wis,, according to the latest indications. The construction project is completed so that the current can be turned on next month. Judson G. Rosebush, president of the company, and other officials have made an inspection of the dam and have found the progress quite satisfactory.

The twin dam under construction by this company at White Rapids, still awaits the spring ice breakup before work can be resumed. Building was stopped last fall when wated backed up in the Menominee river and flooded the coffer dams This power project, also located near Amberg, Wis., will not be completed until fall.

One of the lakes created by the backing up of water from these dams will be named after Judson G. Rosebush and will be known as Rosebush lake. A second lake will be called North lake. The lands which are the bottom of these has been grubbed and cleared completely of stumps and underbrush. The shores will be platted for a summer colony and many of the paper mill officials will establish homes there.

A village is to be built between the Chilk Hills and White Rapids dams, principally for families of the men who are employed at the power plants. A schoolhouse and other necessary buildings are to be erected.

Fatal Accident at Wisconsin Rapids

A fatal accident has marred the safety record of the Consolidated Water Power and Paper Company's mill at Wisconsin Rapids, Wis. Leonard Griffith, 19-year-old mill employee who was scalded by sulphite when a conveyor pipe burst, was unable to survive his burns and died several days after the mishap. He never mustered strength enough to tell how the accident happened. Griffith was alone in the mill during the noon hour when the pipe exploded and scattered scalding sulphite everywhere.

This is the second fatal accident from explosions in Wisconsin mills within the last few weeks. It follows on the heels of a blast of the Kimberly-Clark Company's mill at Kimberly, Wis., in which John H. Lamers, a millwright, was injured and later died at a hospital. This explosion was caused from a blow torch which came in contact with sulphur.

Veteran Paper Mill Employees to Attend Dinner

More than a dozen paper mills or allied concerns, of Appleton, Wis., and vicinity will be represented at the dinner which the Chamber of Commerce of that city will give on March 30 for veteran employees. The list of all concerns takng part includes 149 men and 13 women who have been employed continuously for twenty-five years or more. Each person will be given a gold embossed button. Concerns listed are Kimberly-Clark Company, Wisconsin Traction, Light, Heat and Power Company, Appleton Wire Works, Appleton Woolen Mills, Fox River Paper Company, Valley Iron Works, Tuttle Press, Schlafer Hardware Company, Patten Paper Company, Interlake Pulp and Paper Company, Thilmany Pulp and Paper Company.

Urges Foremen to Be Interested in Safety Work

Foremen were urged to be as interested in the safety of their workmen as they are in the product of their department, by Frank A Lauerman, Chicago, in an address at the Foreman's Safety School conducted at Green Bay, Wis. He is an official of the Interstate Iron and Steel Company, Chicago, and spoke this week at one of the principal safety meetings. He said the question of safety is a definite and tangible thing, and it is fast becoming as necessary and important to the workmen as it has been found to be by the authors of the plan.

J. M. Conway, vice president and general manager of the Hoberg Paper Company of Green Bay, presided at this session. An entire week is being devoted to the subject of safety in Green Bay. An important feature has been a series of first aid demonstrations by H. H. Johns of the Bureau of Mines.

A big closing banquet is to be held next Monday evening, when Judge A. C. Backus, publisher of the Milwaukee Sentinel, Milwaukee, Wis., will be the speaker. Certificates will be presented to those who have attended the sessions of the safety school this winter regularly.

Superintendents to Attend Sulphite Course

Superintendents of sulphite mills in a number of cities will be in Madison, Wis., next week for ten days of instructions. A special course will be conducted at the United States Forest Products Laboratory at which the manufacturer of sulphite will be discussed thoroughly. Among those attending is H. G. Noyes, director of paper and pulp making classes of the Vocational school at Appleton, Wis. He has been the leader in this type of education in night schools of Wisconsin.

General News of the Trade

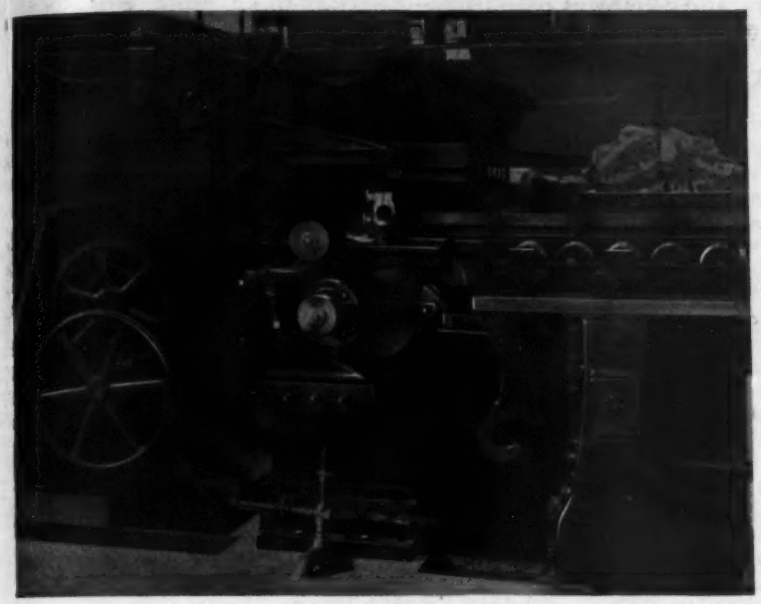
Some publicity for the Peshtigo Paper Company, Peshtigo, Wis., was occasioned this week when an entire carload of "Baby Ruth" candy bars left Chicago bound for the Pacific coast. These were all wrapped with Peshtigo paper, and the local newspaper made capital out of that fact.

Appleton paper mills will soon be stacked high with pulpwood for the season's run again. The woods of northern Wisconsin, Michigan and Minnesota have yielded immense quantities with this year's logging, with the result that about 75 carloads a day are arriving in the city. Extensive shipments will be arriving for the next three months.

William H. Scherer, an employee of the Bergstrom Paper Company, Neenah, Wis., was badly burned about the face and shoulders early this week. A quantity of blazing coal dust was blown out of the furnace into his face. He is confined to a hospital.

The Gilbert Paper Company, Menasha, Wis., all but lost a carload of paper last week. While the car was being switched away from the mill, it left the rails and almost toppled into the Fox river. The car hung over the brink, however, until a railroad wrecking crew could reach the scene to rescue it.

The court fight over the inheritance tax on the estate of the late Meyer Burnstein, former paper stock dealer of Neenah, Wis., has ended with a decision that his legal residence was in Florida. Mr. Burstein left $200,000 and the state of Wisconsin was claiming the tax because of the fact that he resided at Neenah until a year or two ago.



Notice that the shaking breast roll is built as an entirely separate unit. In changing a wire the roll itself drops down into the hook you see hanging from the end of the table roll section. The frame is moved out. The result is that instead of only a few inches of stretch space for the wire there are several feet.

"The Shaking Breast Roll"

The combination of a shaking breast roll with a non-shaking table roll section and our patented Formation Table does give a better formed sheet at higher shaking speeds—by actual test.

Two tests were made on a 50-lb. sulphite bond sheet. At 175 revolutions of the shake the average Schopper test was 3.32. On the same sheet with the shake making 230 revolutions the average test was 4.52.. At the higher speed of the shake there was a 37% increase in the average tensile strength.

With the new principle of shaking the breast roll as expressed in the Champion Fourdrinier you can increase shake speed to more than 400 revolutions a minute—an increase of better than 100 per cent.

The result is that there is better formation. The fibres criss-cross with each other more completely than they've ever done before. You produce a stronger, superior sheet of paper.

Why not let us tell you the complete story of this new and better Fourdrinier, the biggest step forward in paper making since the invention of the first Fourdrinier.

"Changing a wire will now be easy"

No longer is the prospect of changing a wire something to be dreaded. A crew of men who had never seen this construction put on the first wire in one and one-half hours. No one from our shop was there to help—it wasn't necessary.

All of the equipment needed is on the machine—always; there are no beams to lay down; no wrenches or special equipment are required.

The Fourdrinier is moved out to the front side in three sections on tracks set into the floor.

The unwound wire is placed in carriers on two overhead cables permanently supported from the machine sills. The wire is looped and the separate sections returned to operating position.

An experienced crew should change an 80 ft. wire in thirty to forty-five minutes.

The Black-Clawson Company

HAMILTON, OHIO

Export Office:—15 Park Row, New York City

Builders of highest Quality Paper and Pulp Machinery.

Patentees and sole builders of Vertical Dryers and Champion Fourdriniers.

BLACK-CLAWSON

CHAMPION FOURDRINIERS

Built with Machine-Tool Accuracy

Sound Conditions Prevail in Toronto Paper Mart

Higher Grades of Bonds, Ledgers and Writings in Satisfactory Request—Most Mills Said To Have Orders for Six and Eight Weeks Ahead—Firmer Trend Also Experienced For Coarse Papers—Recent Advance Stabilizes Papr Bag Industry

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, Ont., March 21, 1927.—Business in the paper line continues on a satisfactory basis. Jobbers report that, with returning business prosperity, there is a tendency to veer to the better grades in bonds, ledgers and writings. There is also a firmer demand in the coarse paper market and the call for kraft is very fair. In the paper bag division conditions are not yet satisfactory, although a recent advance of 10 per cent is having a stabilizing effect, resulting in more cooperation on the part of distributors and manufacturers in selling and pricing. In spite of stiff competition, light weight paper producers have no difficulty in disposing of their output and the situation is strong.

Most of the book and writing mills have orders for six and eight weeks ahead and there is a good export requisition for all classes of Canadian papers, although this department is secondary to the home market in flat papers. New Zealand and Australia are now buying enlarging quantities of Canadian output.

The ground wood pulp situation shows a softening tendency, as there has been plenty of water of late to operate the grinders, and the output has been large. There are, however, no large supplies on hand. The best grade of mechanical pulp is commanding $33 a ton at the mill, although sales of the cheaper lines have been going at $30.

Mills Anxious Over Water Supply

Dredging operations have started again in the Welland Canal and are causing considerable anxiety to the paper mills in the Niagara district, which have difficulty in keeping up the quality of their paper owing to water impurities. Several of the producers held a meeting recently and discussed the advisability of proceeding with an injunction, which was held over some time ago, on the statement of the government authorities that dredging activities would not be resumed until a later date. This date appears to have been advanced and the old trouble is becoming apparent. The civic filter in Thorold is not yet completed and other private plants are in much the same condition.

Officials Speak at Annual Meeting

At the annual meeting of the F. N. Burt Company, paper box manufacturers, S. J. Moore, of Toronto, president, which was held in Toronto recently, the shareholders were addressed by executives of the operations of the company's factories in Buffalo. Miss Cass, the general manager, spoke briefly on the new addition now practically completed. The plant has a total flooring space of 300,000 square feet. The company will make further economies in production. Inter-factory cartage, for instance, is being eliminated and all operations are being co-ordinated to a greater extent than previously. H. C. Coppins, superintendent, told of the planning and carrying out of construction, and J. H. Paterson, comptroller, referred to the economies to be effected by the consolidation of the plants. The retiring Board were all re-elected without change.

Business Men Visit Kapuskasing

S. B. Gundy, former president of the Toronto Board of Trade, and other members of the Board have returned from a trip to the pulp and paper mills of the northern part of Ontario. The party visited Kapuskasing, where remarkable development is going on. Some time ago the *New York Times*, which is behind the big enterprise at Kapuskasing, built a railway of 50 miles length to Smoky Falls, which will be the site of the power plant, and there 75,000 horse power will be developed. The members of the Board of Trade inspected the power site going over the newly laid rails. The power development will result in the erection of a news print mill at Kapuskasing, which, when completed, will turn out 500 tons daily, which will be shipped direct to New York for the use of the *Times*. J. H. Black, of Toronto, president of the Spruce Falls Power and Paper Company, informed the visitors that, in an expenditure of $7,000,000 for equipment of the huge plant, all except a few thousand dollars will be spent in Canada. The development of Kapuskasing will mean a population of 5,000 for the town in the near future. Five thousand square miles of timber limits will supply the big news print plant with pulp wood.

Notes and Jottings of the Industry

W. J. Trimble, paper mill contractor, and Mrs. Trimble, Toronto, who have been spending the past two months in Cuba, have returned home.

H. L. Chappell, who has been on the staff of the Wilkinson Paper Company, has joined the sales force of the Victoria Paper and Twine Company, Toronto.

By letters patent the name of the Wilkinson Paper Company, Ltd., Toronto, has been changed to the C. V. Syrett Paper Company, Ltd. C. V. Syrett, for many years managing director of the Victoria Paper and Twine Company, some months ago purchased the business of the Wilkinson Paper Company and became its president and general manager. He is head of the new organization bearing his name.

The Daverin Paper Mills, of Camden East, Ont., have been adjudged bankrupt, and Humphrey Colquhoun, of Toronto, has been appointed custodian. The plant turned out bond, envelope, offset and specialty papers, and the production was about twelve tons a day. The Daverin Paper Mills have had a career of many ups and downs and the property has changed hands many times during the past few years.

Col. C. H. L. Jones, vice president of the Spanish River Pulp and Paper Mills, Sault Ste. Marine, Ont., recently paid a visit of inspection to the plant of the Fort William Paper Company, Fort William, of which he is also one of the vice presidents.

Lord Willingdon, Governor-General of Canada, and Lady Willingdon, will pay a visit to Port Arthur of April 28. It is hoped that their excellencies will be able to inspect the new plant of the Thunder Bay Paper Company and officially declare it open, provided the work can be sufficiently advanced by that date.

The Provincial Paper Mills, and the Lincoln Pulp and Paper Mills, are well up in the running for awards in the National Safety Council Intermill Safety Contest, in which 119 plants in Canada and the United States have entered. The competition started some time ago and is very keen.

Frank Chapman To Be Assistant Buyer

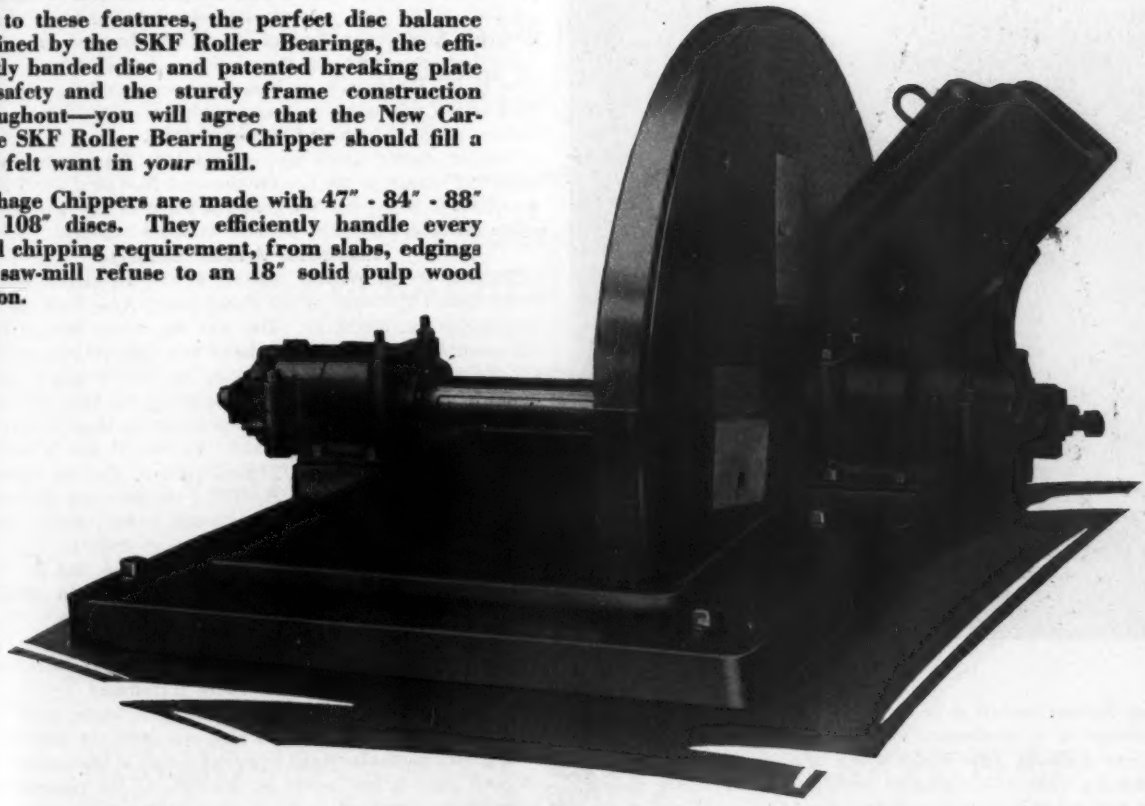
CORINTH, N. Y., March 21, 1927.—Frank Chapman, who has been identified with the International Paper Company for many years, part of the time at the Hudson River Mill here, has been appointed assistant buyer and will be located at the head offices of the corporation in New York City after April 1. He will be associated with G. E. Smith, purchasing agent. Mr. Chapman for the last few years has been located at Three Rivers, Canada, where he filled the position of agent.

Now! The Carthage Chipper Roller bearing equipped

Lower starting torque—less power input—greater oil conservation; these, and many other savings are now possible with the New Carthage SKF Roller Bearing Chipper.

Add to these features, the perfect disc balance obtained by the SKF Roller Bearings, the efficiently banded disc and patented breaking plate for safety and the sturdy frame construction throughout—you will agree that the New Carthage SKF Roller Bearing Chipper should fill a long felt want in *your* mill.

Carthage Chippers are made with 47″ - 84″ - 88″ and 108″ discs. They efficiently handle every wood chipping requirement, from slabs, edgings and saw-mill refuse to an 18″ solid pulp wood section.



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Carthage Machine Company

Manufacturers of Pulp and Paper Mill Machinery

CARTHAGE, NEW YORK

BELLEVILLE, ONT., CANADA

Waste Material Dealers' Meeting and Banquet

The Fourteenth Annual Meeting of the National Association of Waste Material Dealers, Inc., was held on Wednesday morning, March 16, the meeting being called to order by President Frankel. It proved one of the best attended meetings in recent years.

The treasurer's report and the auditor's report showed the association to be in a sound financial condition, and the secretary's report indicated that the association, through its various departments, had been perfecting and extending the individual services rendered to members to an extent that was bringing about a situation where membership was becoming almost indispensible to those who had once obtained it and used the services available to them. The chairmen of the various divisions reported and

G. H. RADY, PRESIDENT

each division seemed to be carrying on its work and handling its problems in a satisfactory way. Following the reports of the various divisions, President Frankel read his annual report and Secretary Charles M. Haskins read his annual report covering the work of the association during the year.

New Officers Elected

After the various reports had been read and adopted, the meeting proceeded to elect a president, fifteen directors to serve for two years and one director to fill a vacancy. The full ticket as selected by the Nominating Committee and duly elected was as follows:

President—G. H. Radv.

Directors for Two Years—Egmont L. Frankel, Harry R. DeGroat, Carlton B. Overton, Stuart B. Sutphin, Joseph Michaels, George M. Graves, E. B. Friedlander, Fred Mayer, Mark B. Speer, A. J. Moran, Isaac Marx, E. H. Silberman, Richard Nathan, Morris Gintzler, A. Glant. Director for One Year—Herman Goldstein.

Following the election, President Frankel thanked the members for their cooperation during his term of office and congratulated the association on having chosen as his successor a man so eminently fitted to lead the association. He then called G. H. Rady to the chair and the meeting proceeded to take up matters of new business.

Chicago Banquet Discussed

Benjamin Friedman, chairman of the Western Division, outlined reasons which made him feel that an annual banquet of the association should soon be held in the West. His efforts were ably seconded by Leo Messinger, secretary of the Western Division, and while it was felt that the Fifteenth Anniversary Banquet should be held in New York, there was very strong sentiment for holding the banquet of the following year in the West. As a matter of fact, President Rady stated that, while he would be guided by the wishes of the Board of Directors, he would, if he was in office at that time, favor such a movement. Already plans are under way for a large meeting, to be held in Chicago in the Fall of this year, in preparation for bringing together at the Fifteenth Anniversary Banquet at least one thousand guests.

Another action taken by the meeting was to elect by unanimous vote F. W. Reidenbach, an honorary member of the association. This action was taken on recommendation of the Board of Directors, which also was by unanimous vote.

Another matter which was presented to the members was a suggested change in the Constitution and By-Laws, which change would make it possible for concerns allied in any way with the waste material business to become Associate members.

Fourteenth Annual Banquet

The Fourteenth Annual Banquet of the association was held in the Grand Ballroom of the Hotel Astor, New York, on Wednesday evening, March 16. This was the second banquet of the organization at which the attendance was sufficiently large to call for the use of the Grand Ballroom, one of the largest banquet rooms in New York City. Notwithstanding the very quiet condition of business, the attendance was almost as large as last year, when it was close to six hundred. In fact, it was a matter of very great surprise to most of those present that the attendance was as large as it was, and repeatedly the secretary was complimented on the ability of the organization to have drawn together such a large and representative number of dealers.

The entire ballroom was thoroughly decorated, and the beautiful electric reproduction of the seal of the association added very materially to the general appearance of the ballroom. This, together with the floral decorations, was favorably commented upon, and the Grand Ballroom of the Hotel Astor never looked better.

President G. H. Rady Introduced

President Frankel called the gathering to order about 10:00 p. m. and, in his usual splendid way, welcomed the members and their guests, particularly the large number of manufacturers present, and after a few words in reference to the association and its problems, presented to the members and guests assembled the association's new president, G. H. Rady. Mr. Rady was graciously received and his remarks were to the point and well chosen.

President Frankel next introduced as the first speaker, Edward Ford, a humorist, who for twenty-five minutes kept the guests in the best of humor. The last speaker of the evening was U. S. Senator M. M. Neely of West Virginia, who was listened to with respectful attention. The banquet closed with a few brief remarks from President Frankel.

The Banquet Committee in charge of the affair was made up as follows: H. H. Cummings, Chairman; Henry Lissberger, Carlton B. Overton, John A. Murphy.

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Mills at Sprangsviken, Sweden

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Sole Agents for the U. S. A.

J. Andersen Celebrates Sixtieth Birthday

On March 29, Johannes Andersen, active head of the firms of J. Andersen & Company and the Pulp and Paper Trading Company of New York City, and recognized Dean of Wood Pulp Importers, will celebrate his sixtieth birthday. On this occasion, Mr. Andersen, popularly known in the wood pulp trade as "Jack" Andersen, can look back not only upon a most interesting and successful business career, but having always been identified with the pulp and paper industry, he may also feel assured of having rendered a lifetime of important services to one of America's greatest and most rapidly growing industries.

Came to New York in Early Eighties

In 1882 at the age of 15, Jack left his birth place, Sandefjord, in Norway, and went on his father's ship to the City of Quebec,

JOHANNES ANDERSEN

where he was to complete his education. But as early as the following year he moved to New York, where he obtained a temporary position in the office of the Swedish-Norwegian Consul, Mr. Bors, which after Mr. Bors' retirement resulted in a permanent position with his successor and former business partner, Mr. DeMaziere. Another employee in this business at that time was the late Frederick Bertuch, who in 1891 decided to establish his own business and founded the well known firm of Frederick Bertuch & Co., in which Mr. Andersen became actively engaged and secured an interest. During the following years while traveling among the paper mills soliciting orders for the new firm, Mr. Andersen laid the foundation for many business connections and personal friendships which have lasted uninterruptedly up to the present day. Frederick Bertuch & Co. then represented indirectly the leading pulp mills in Norway through being the correspondents of the company of Consul Christian Christoffersen. But at the spectacular failure of Christoffersen in 1899, Mr. Andersen was sent to Europe to make direct connections with pulp mills and obtained among several other agencies, that of the Kellner-Partington Paper and Pulp Company, the largest manufacturers of bleached sulphite pulp in the world. This agency as well as many others secured at that time are still retained by Mr. Andersen's firm, and this is also true of the first agency obtained in this country, that of the J. & J. Rogers Company, Ausable Forks, N. Y.

J. Andersen & Co. Formed in 1912

On January 1, 1912, Frederick Bertuch retired from business and his firm was succeeded by the new firm of J. Andersen & Co., of which Mr. Andersen is a senior partner, his co-partner being Morris Gintzler, who had also been employed in Mr. Bertuch's company.

In the meantime the domestic business had developed to such an extent that it was deemed advisable to manage this end of the business separately and for this purpose the Pulp and Paper Trading Company was incorporated in 1904, the capital stock of which is owned by the J. Andersen & Co.

This new company confines itself to dealing in American and Canadian pulps of all kinds and in American as well as foreign paper. The firm of J. Andersen & Co. is confined strictly to the importation of European pulps.

Factors in Mr. Andersen's Success

Excellent business ability, keen judgment and untiring effort are not alone responsible for the sound development of this business. Very much is due to Mr. Andersen's sense of fairness and loyalty which together with his personal charm have won for him a prominent and respected position in the industry and a host of devoted friends on both continents. These are qualities which have enabled Mr. Andersen and his firms to contribute enormously toward the mutual feeling of confidence and good will which today exists between the pulp and paper industries of America and foreign countries and which is so essential for successful international business relations.

Decorated by King of Norway

In recognition of his services to Norway in the interest of the pulp industry and also for assistance rendered to Norwegians in America, the King of Norway in 1923 conferred upon Mr. Andersen the Knighthood of the St. Olaf Orders First Class.

In addition to his business interests, Mr. Andersen is a director of the New Netherland Bank of New York on whose board he has served for the past 10 years, and in spite of his many business duties he finds time also to serve as Chairman of the Board of Trustees in the Norwegian Seamen's Mission Church of Brooklyn, who are very largely guided by his advice and influence. Among his clubs may be mentioned the New York Athletic Club, Crescent Athletic Club of Brooklyn, Montauk Club of Brooklyn and Norwegian Club of Brooklyn.

To Be Entertained at Dinner

At a dinner party given in New York City in celebration of his birthday, Jack will be entertained by some of his closest personal friends from both continents. A large number of personal and business friends, unable to be present on this occasion, will join in extending to him their congratulations and wishes that he may for many many years enjoy excellent health enabling him to pursue his business career and permitting him to enjoy his favorite pastimes, horseback riding, golfing and motoring.

In their thoughts they will also include Jack's two sons, Erik and Ralf, of whom the former is already active in his father's business, while the latter has chosen an academic career.

M. Gottesman To Represent Rechberg Pulps

M. Gottesman & Co., Inc., 18 East 41st street, New York, N. Y., are announcing to the trade their appointment as exclusive selling agents in the United States of the Rechberg bleached and unbleached sulphite pulps. The Rechberg mill is one of the foremost Austrian manufacturers, and produces a material which is very much preferred among Continental consumers of pulp.

M. Gottesman & Co. also represent in this market a number of large Scandinavian and Continental producers of bleached and unbleached sulphite, kraft pulps and groundwood, and operate the M. Gottesman & Co. Aktiebolag of Stockholm, Sweden, for a closer association with their numerous European connections.

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Boston Paper Trade Association Meets and Dines

BOSTON, Mass., March 21, 1927.—With about 150 members present the Boston Paper Trade Association held their Forty-First Annual Meeting and Banquet at the Algonquin Club Wednesday evening, March 16. The Hon. Eliot Wadsworth, former Assistant Secretary of the Treasury and Secretary of the World War Foreign Debt Commission from its organization until April, 1925, was the speaker of the evening. Before the dinner, there was an informal get-together. Throughout the banquet an orchestra played, and a singer rendered vocal selections.

President Norman Harrower, called the meeting to order. He mentioned the fact that during the year the association had lost by death six members, and asked all to stand in silent tribute while the secretary read their names. They were: Benjamin M. Jackson, Archibald P. Ramage, Carleton Knight, N. L. R. Gardner, A. W. Esleeck and Charles Henry Coye. After the names were read a bugler sounded taps. The reports were then read, all of which were accepted.

Reports of Secretary and Treasurer Accepted

Secretary F. Bendel Tracy's report for the year showed that on March 17, 1926, the active members numbered 195 and associate members, 9. Six new members were added during the year, 6 were lost by death, 1 active membership changed to associate, and 1 dropped. The active membership now is 193, and associate 9, making the present total membership 202. The members elected during the year Philip Weston, Herbert A. Wingate, Ewing F. Lowe, Maurice A. Park, George J. Cadwell, and Dexter D. Coffin.

Treasurer Thomas H. Casey's report showed a balance on hand of $2,954.06, and $1,500 in government bonds, a gain of $199.20 over the report of a year ago. Charles H. Wood, auditor, stated that he had examined the accounts and found them correct.

Election of Officers

Secretary Tracy read the report of the nominating committee because the chairman (John E. A. Hussey) was unable to be present on account of an operation which he underwent in December and Colonel Proctor was presiding at the Middlesex Club dinner. The officers nominated were as follows:

President, Norman Harrower; First Vice-President, Joseph D. Snell; Second Vice-President, Hubert L. Carter; Treasurer, Thomas H. Casey; Secretary, F. Bendel Tracy. Executive Committee: Charles A. Esty, Charles W. Fields, and Joseph A. Lowe. Membership Committee: Perry B. Von Olker, chairman; W. W Jenks, Charles A. Young, Royden Loring, and R. M. Stone. Arbitration Committee: George W. Wheelwright, chairman; Arthur L. Hobson, Irving N. Esleeck, W. E. Pratt, and Willard F. Smith. Auditor: Charles H. Wood.

President Harrower announced that the association could again enjoy an outing at the Charles River Country Club either June 7 or June 8 and that the members were much indebted to Mr. Vivian for this.

On a motion of Mr. Snell it was voted that the secretary send Mr. Hussey a letter of sympathy and congratulation on his improvement in health, with the hope that he would be at the next meeting.

Mr. Wadsworth's Distinguished Career

In introducing Mr. Wadsworth, President Harrower outlined his career, saying that he was a native of Boston and a graduate of Harvard in the Class of 1898. After graduation he was with Stone & Webster, becoming a partner in 1908. In 1915 he was appointed a member of the Relief Commission of the Rockefeller Foundation, to study conditions in Europe. Later he resigned to devote his time to the American Red Cross. He was a member of the War Council appointed by President Wilson and was awarded the Distinguished Service Medal. In 1919 he became a chairman of the executive committee of the Howard Endowment Fund. In 1921 he became Assistant Secretary of the Treasury and about a year later Secretary of the World War Foreign Debt Commission. He resigned in 1925 and last year was elected a member of the Massachusetts Legislature.

War Debts Analysed

Mr. Wadsworth outlined succinctly the events preceding the formation of the Allied Debt Funding Commission and the funding of the war debts of the European nations, emphasizing at the outset the fact that the interest on the war debts bring in $200,000,000 a year, without which more taxes would be necessary He noted the debt of $26,000,000,000 owed by this country in 1921, that we were borrowing at high interest, with a large amount due in March of that year. The Harding administration was opposed to a loan at 6 per cent, but a 5¾ per cent loan was finally agreed upon. Mr. Wadsworth touched on the course of the Liberty Bonds and the getting out of business on the part of the Government.

"The foreign debt commission was at first composed of Secretaries Mellon, Hoover and Hughes, Senator Smoot and Congressman Burton. Mr. Wadsworth was elected secretary. The commission sent letters to 17 countries that they were ready to do business, but received no answers. They sent another letter. Finally England replied that she would send over a commission and Mr. Baldwin and Mr. Chamberlain came. After meetings which extended over nine weeks it was agreed that the loan of $4,600,000,000 should be paid in 62 years, with 3 per cent interest the first two years and 3½ per cent after that. The terms were accepted by England and ratified by this country.

"Negotiations with other countries followed and now all has been settled. The 62 years, which are spoken of as meaning a 'mortgage for three generations,' was England's own proposition. Four days after the war began England borrowed $200,000,000 of this country, but had no desire to take the money as a gift, and one use of it was to buy wheat. This country loaned England money for their cotton and when the war was over England had an immense amount of cotton. They sold the cotton in their own country and sold goods in the United States, so that we were carrying their mills while they were competing with this country.

Mr. Wadsworth said that he personally thought it would be bad policy to cancel the loans, because it would be very hard for foreign countries to borrow money here again. "If we wanted to borrow from other countries, it would hurt our credit over there. There must be a constant exchange of money and notes. A French banker has figured that Americans are now spending in Paris $1,000,000 a day, 60 per cent more than during the previous year and the rate is expected to go on increasing. Foreign trade doubles in about every 15 years.

"This subject has an important relation to our business as a whole. We should be thankful to Mr. Mellon who has eliminated from the world the demand loan. Now we know that no one has been hurt by it and that International credit has not been hampered. Taking it altogether there has been a most desirable settlement of the pitfalls left by the war. People over there are working. They loaned to us for 50 years and 100 years and they will again. War debts can be considered a thing of the past."

Mr. Wadsworth was given a rising vote of thanks.

Those present were as follows: George D. Allen, R. W. Allen, George C. Andrew, John A. Andrew, Sumner B. Andrew, Donald Appleton, Charles L. Baird, Harold A. Ball, Henry C. Barr, John R. Bartlett, Sidney W. Bartlett, Arthur F. Bell, Edward D. Bement, Prescott Bigelow, W. J. Bigley, W. W. Binford, Floyd Blackman, John F. Blackman, H. L. Blake, George Blandy, A. M. Boothbay, H. S. Brown, Stephen C. Burgoyne, Arthur M. Burr, George J. Cadwell, A. P. Carter, Hubert L. Carter, Paul D. Caskey, T. Charles Casey, T. H. Casey, F. C. Cate, H. E. Chase, Asaph Churchill, Dexter D. Coffin, W. H. Cowles, E. Ashley Crowell, E.

(*Continued on page 40*)

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Obituary

William Alexander Gray

William Alexander Gray, president of the Gray Envelope Manufacturing Company, of New York, died of heart disease Tuesday night of last week at his home at 249 Kents Place Boulevard, Summit, N. J. Mr. Gray, who was a brother of former Congressman Edward W. Gray, of Newark, was 51 years old and had been ailing for many months.

Mr. Gray was born in Jersey City. In 1909 he founded and became president of the General Paper Goods Manufacturing Company, with offices in the Bush Terminal Building. In this same office six years ago he started the Gray Envelope Manufacturing Company, of which he was president and treasurer when he died.

In addition to the former Congressman, Mr. Gray is survived by his widow and their seven children, two other brothers and two married sisters. Major Robert L. Gray, a West Point graduate who served in the world war, is one of the brothers and was Mr. Gray's partner in the envelope manufacturing enterprise. The other brother is David B. Gray, of Montclair.

Mr. Gray was a member of the First Presbyterian Church of Summit, the Overlook Lodge F. and A. M., also of Summit; the Summit Lodge, B. P. O. E.; the Brooklyn Chamber of Commerce, the Advertising Club of New York, and the National Bureau of Envelope Manufacturers.

Funeral services were conducted at his residence Thursday evening soon after the arrival of the 6:45 train from the Hoboken terminal of the Lackawanna Railroad. Interment in Fairmount Cemetery at Chatham, N. J., was on Friday morning and was private.

BOSTON PAPER MEN DINE

(*Continued from page 38*)

Lindsey Cummings, Frank B. Cummings, C. L. Dodge, Charles T. Dole, William S. Dole, Albert M. Eaton, W. R. Elliott, Gordon E. Emerson, Irving N. Esleeck, C. A. Esty, A. F. Fay, Charles W. Fields, Robt. Finlay, Paul S. Fiske, Max Frank, Leroy L. Gardner, John L. Gibson, A. C. Hall, C. S. Hall, A. Lawrence Ham, Arthur E. Ham, Norman Harrower, C. Hartwell, Edgar P. Hay, W. H. Hilton, Herbert B. Hollis, A Murray Howe, W. R. Ingersoll, Walter P. Jones, J. P. Jordan, Frank A. Juckett, F. H. Keep, A. G. Keith, John Kelley, John F. Kuster, A. C. Lamb, W. W. Langtry, E. H. Little, Wm. B. Livermore, Royden Loring, Erving F. Lowe, George H. Lowe, M. L. Madden, Russell S. Madden, Wm. J. McLellan, Bryant McQuillen, Frank H. Merrill, W. A. Merrill, H. A. Moses, P. K. Mohun, J. L. Munro, J. J. O'Brien, L. B. Ogden, Maurice A. Park, A. E. Pearson, Lewis sell, F. Henry Savage, Fred Schlosser, Walter P. Simonds, Albert Porter, W. Edwin Porter, Jr., E. R. Potter, F. W. Power, Lawson Ramage, C. Edward Rice, R. B. Rising, William Ross, G. F. Russell, Henry F. Savage, Fred Schlosser, Walter P. Simonds, Albert R. Smith, Donald R. Smith, Joseph D. Snell, W. N. Stetson, Jr., W. B. Stevenson, William E. Sullivan, J. G. Swift, J. G. Swift, Jr., A. A. Tanyane, R. P. Teele, Charles W. Townsend, F. B. Tracy, H. C. Upham, W. G. Very, John W. Vivian, Perry B. Von Olker, Eliot Wadsworth, E. C. Walker, H. E. Waite, Sheldon E. Wardwell, Lester H. Watson, Karl H. Ways, C. Frederic Wellington, Charles G. Wells, R. H. Welsh, Percy E. Weston, Herbert A. Wingate, Charles H. Wood, Fred L. Wood, William H. Wood, Harry R. Woodward, Charles A. Young and J. C. Young.

To Investigate Canal Lands in Ohio

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, March 22, 1927.—The fight over the proposed abandonment of the Miami & Erie canal from a point near the State Dam, north of Middletown to a point just north of Cincinnati, still is in progress in the Ohio Legislature.

Senator G. M. Kumler of Preble county, who is one of the representatives from the Miami Valley in the Upper House, is not satisfied in his own mind that the canal should be cut up and deserted in sections, as proposed, and this week he introduced a bill providing for a further investigation of canal lands and waterways to determine the possibility of barge canal traffic on certain sections, as for instance between Cincinnati and Dayton, with Hamilton, Middletown, Franklin, Lockland and other paper mill towns intervening. He succeeded in having his bill go through the senate. It provides for an appropriation of $10,000 for the purpose.

The House Committee has recommended for passage the bill by senator Tom of Toledo providing for abandonment of 17 miles of the M. & E. canal for canal purposes, between Maumee and Grand Rapids, Lucas county, Ohio. The Senate has passed the measure. The committee action was taken despite the recommendation for a joint House and Senate investigation of canal conditions.

The deepest interest both in abandonment movement and preservation of the time-honored waterway is evidenced in the Miami Valley.

Long Service Employees in Paper Mills

[FROM OUR REGULAR CORRESPONDENT]

GLENS FALLS, N. Y., March 21, 1927.—A recent contest staged in this city brought to light many cases of long service records among paper mills of this vicinity. Among those entered in the contest were Frederick Morril, with a record of fifty-one years continuous service with the United Paperboard Company, of Thomson, and Reuben Hopkins, forty-nine years a riverman with Finch, Pruyn & Co. Fred Farrell, the oldest active employee of Finch, Pruyn & Co. in point of service, lost only three months' time in forty-eight years and this was due to a slack period. Louis L. Lapointe, a cooper with Finch, Pruyn & Co., is only a few months behind Mr. Farrell in record of service.

F. A. Chapman has served forty-five years with the Sandy Falls Iron & Brass Works, while Augustus Carpenter, another employee of the firm has a record of forty years.

E. F. Murphy, superintendent of steam power of the International Paper Company, has served forty-three years with the I. P. Co. and its predecessors. Paul Brunet was the entrant of the Union Bag and Paper Corporation with a record of thirty-four years of continuous service at the Hudson Falls plant.

Visit Sorg and Smith Mills at Middletown

DAYTON, Ohio, March 22, 1927.—The Fellowship Club of the Ergy Register Company, of Dayton, visited the mills of the Paul A. Sorg Paper Company at Middletown and the Frank Smith Paper Company last week.

The inspection of the practical workings of these modern mills was greatly enjoyed and proved highly educational to the members.

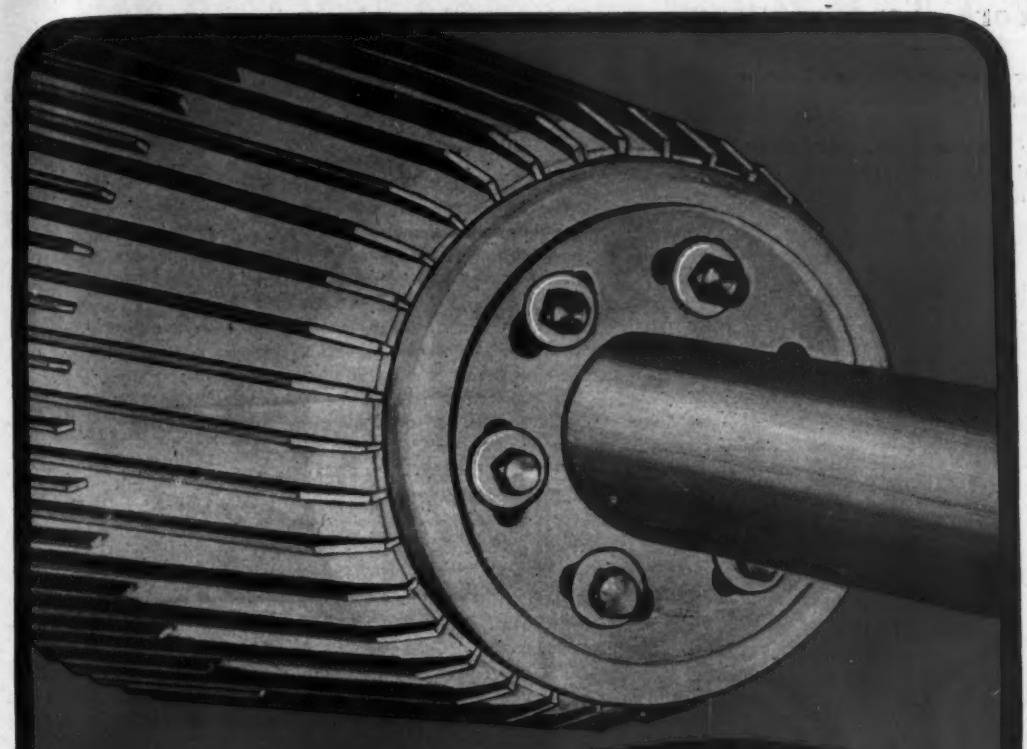
The entire membership of the club, in charge of L. M. Smith, president, motored to Middletown, 30 miles distant, and had dinner at the Hotel Manchester at 6:30. They were welcomed by City Manager L. A. Waldner. The speaker of the evening was Attorney Benjamin F. Harwitz who has had much in common with paper men during his busy professional career.

The visitors, who were foremen and department heads, then visited the paper mills. This was the first of a series of visits to industrial points planned by the club. The Ergy Register Company is a liberal consumer of paper.

Crown-Willamette Gets Hearst Contract

SAN FRANCISCO, Cal., March 17, 1927.—A contract believed to cover the largest tonnage of news print ever sold on the Pacific coast in one transaction was closed between William Randolph Hearst and the Crown-Willamette Paper Company, according to announcement issued by Archie B. Martin, executive vice-president of the paper company.

The total involved in the transaction is said to be in excess of $150,000,000, covering news print to be furnished Hearst Pacific coast publications for 10 years, beginning January 1, 1927.



BUILT TO TAKE PUNISHMENT

It takes a mighty unusual plug to stand up, day after day, under the stress and strain in the heart of an active Jordan. But the NOBLE & WOOD Jordan Plug is *unusual!* It "stands the gaff" because it's built to take punishment. Here's why:

- ....The nose, where the hardest wear and shock comes, is tough as a hog's nose. It is fitted with a patented steel disc of recently improved design, that clamps tightly over bars and wood fillers —holding *both* firmly. This disc is held down with Muntz metal cap screws and lock washers that no amount of vibration can loosen.
- ....The bars are of high grade steel (Hy-Ten-Sl bronze, if desired) bearing on the casting *throughout their entire length.* This construction minimizes vibration and strain. Bars are of the "hook" pattern, bound to the plug body with bands of the best engine bolt iron.
- ....The heavily reinforced solid hubs of the plug are hydraulically pressed on a heat-treated Vanadium steel shaft of N. Y. N. H. & H. specifications.

No stronger, better constructed plug was ever put in a Jordan. Every possible precaution has been taken against wear, tear and shut-downs.

Before you decide on your next Jordan, or other paper making machinery, talk things over with our engineers

The NOBLE & WOOD MACHINE CO.

HOOSIC FALLS, N. Y.

New York Trade Jottings

The Forbes Paper Company have leased the seven story loft building at 32 Laight street, New York.

* * *

The J. J. Murphy Associates, Inc., paper, paper products, etc., of 225 West 34th street, has been incorporated in New York, with a capital stock of $100,000.

* * *

Harry L. Derby, president of the Kalbfleish Corporation, of 200 Fifth Avenue, New York, has returned from Argentina, where he has been investigating the casein situation.

* * *

In the Eastern District, New York, Judge Moscowitz has appointed Adolph C. Kiendi receiver for the Paramount Corrugated Box Corporation, of 195 West 9th street, Brooklyn, in bond of $2,500.

* * *

The Westinghouse Air Brake Company for the year ended December 31, 1926, reports net income of $10,535,062, after charges and Federal taxes, equivalent to $13.28 a share (par $50) earned on 793,027 shares of stock. This compares with $6,965,538, or $8.78 a share, in 1925.

* * *

The Perkins-Goodwin Company, one of the largest organizations engaged in the merchandising of pulp, paper, etc., who for the last fourteen years have been located in the Aeolian Building, 33 West 42nd street, have leased the 27th floor in the new French Building, on the northeast corner of Fifth Avenue and 45th street.

* * *

McKenna & Phelps, Inc., Matthew M. Berger, proprietor, paper converters and manufacturers of small roll products, have renewed their lease, with 5,000 square feet additional space, at 489-493 Broome street, New York. This extra space puts them in a better position for quick service for their cutting and slitting and paper specialties. Their new telephone numbers are Walker 0033 and 0034.

* * *

The Westvaco Chlorine Products Corporation has sold through Taylor, Ewart & Co., New York, $2,500,000 of ten year 5½ per cent sinking fund gold debentures, the issue being oversubscribed. The bonds were priced at 98 to yield more than 5.75 per cent. Westvaco Chlorine Products Corporation owns all of the capital stock of the Westvaco Products, Inc., a company engaged in the manufacture and sale of chlorine, caustic soda and related products.

* * *

The annual meeting of the Paper Stock Division of the National Association of Waste Material Dealers, was held at the Hotel Astor, New York, on Tuesday, March 15, the meeting being called to order by Chairman Rady at noon. After the minutes of the previous meeting had been read and approved, Mr. Rady reported in connection with the question of duty on wiping rags, after which there was some discussion in connection with a request which had been made to the Felt Manufacturers Association, and this matter was left in the hands of the president. Dave Clark, of St. Louis, was unanimously elected chairman for the coming year.

* * *

A meeting of the Waste Paper Division of the National Association of Waste Material Dealers, was held at the Hotel Astor, New York, on Tuesday, March 15. The meeting was called to order by Robert F. Graham, chairman. H. F. Masman reported regarding a conference held in Chicago in reference to lower freight rates on waste paper from the East to the West. Also in connection with a proposition submitted to the Classification Committee regarding the tying up of bundles of newspaper. Following a general discussion in connection with business conditions, Robert F. Graham was re-elected as chairman.

* * *

In addition to the regular round table discussion at the weekly luncheon of the New York Division of the Salesmen's Association of the Paper Industry on Monday last, the following resolution was passed and the secretary instructed to transmit it to the members of the State Legislature and give it as much other publicity as was possible. *"Whereas*: The necessities of their business require traveling salesmen to be absent from their legal residence for long periods, and *Whereas*: Such absences frequently interfere with their exercising the right of franchise because of inability to register during the present limited period, *Be It Therefore Resolved*: That the New York Division of the Salesmen's Association of the Paper Industry endorses Senate Bill No. 1511, introduced by Senator Fearon, providing for an amendment to the election law which will permit registration at any time between July 1 and September 20, and requests the support of this measure by all members of the Senate and Assembly of New York State."

Middletown Hydraulic Co. Wins Victory

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, March 22, 1927.—An important victory for the Middletown Hydraulic Company was attained the past week in the decision of the Ohio Supreme Court in the case of former Attorney General Charles C. Crabbe against the Middletown company, when the court denied a judgment of ouster against the company.

The court held that the state of Ohio is entitled to the use of 8,000 cubic feet of water per minute from the canal feeder and that the Middletown Hydraulic Company is entitled to the rest of the water.

According to Attorney Benjamin F. Harwitz, the hydraulic company conceded the state had a right to this quantity of water in the brief submitted in support of the case.

The case was instituted nearly two years ago by the then Attorney General Crabbe who caused an action of quo warranto to be brought against the hydraulic company.

The hydraulic company filed an answer and the state a demurrer to same which was overruled, and the case went to trial, testimony being taken by a special master commissioner, Roy M. King, who went to Middletown on numerous occasions to take the testimony of state and defense witnesses.

The best legal talent obtainable in Southern Ohio was interested in the matter, representing one side or the other.

At one time it is stated the hydraulic did take as much as 15,000 cubic feet of water per minute from the canal but the current was too strong and washed the banks.

The case turned on water rights, said to have been the property of Abner Enoch, mill owner and pioneer industrialist of the Miami Valley, who in 1825 made an agreement with the state for construction of the State Dam and joint use of the canal feeder. Enoch's power rights subsequently were transferred to the Middletown Hydraulic Company (in 1851), since which time the paper mills and other industries have had water power facilities.

J. & W. Jolly Plant Damaged by Fire

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., March 22, 1927.—The foundry and machine shop of J. & W. Jolly, Inc., at 529 South East street was damaged to the amount of $40,000 Wednesday night by a two alarm fire that started in the pattern shop and spread to other parts of the building. The plant will be unable to operate for a few days. Martin L. Cramer, manager of the plant, said that the loss from being unable to fill orders booked was more serious than the fire loss as that was covered by insurance. The concern manufactures water wheels, elevators, and also does a large foundry business.

Trade Marks Department

CONDUCTED BY NATIONAL TRADE-MARK CO., WASHINGTON, D. C.

The following are trade mark applications pertinent to the paper field pending in the United States Patent Office, which have been passed for publication and are in line for early registration unless opposition is filed promptly. For further information address National Trade Mark Company, Barrister Bldg., Washington, D. C., trade-mark specialists. As an additional service feature to its readers, PAPER TRADE JOURNAL gladly offers to them an advance search free of charge on any mark they may contemplate adopting or registering.

Individuals or concerns who obtained registrations in the U. S. Patent office of their trade-marks in 1907, must renew these registrations this year; otherwise their registrations will expire. The Patent Office does not cite expired registrations against pending applicants, which makes renewal of registrations necessary.

CONTINENTAL.—No. 219,060. Continental Bank-Supply Company, Mexico, Mo. For bank supplies, specifically pass books, check books, coin envelopes, and blank forms of all kinds used in banking business.

TOROSUS.—No. 241,560. Brittains, Limited, Cheddleton, near Leek, England. For tissue paper generally, but more particularly those adapted to be made into carbon paper, stereotyping tissues, and copying tissues.

MELTOPLATE.—No. 242,021. The Perkins Goodwin Company, New York City. For book and printing paper.

FOREST FLEECE.—No. 242,431. William A. Hermanson, Boston, Mass. For paper manufactured of wood pulp for use as box padding.

PEOPLES SAFETY BOND.—No. 231,037. Harlem Card and Paper Company, New York City. For blank forms and correspondence paper, writing and printing paper and envelopes, and letterheads.

ORIGINALITY PAPERES.—No. 234,727. The New York-New England Company, Holyoke, Mass. For writing and printing papers, and ledger, record, vellum, envelope, text book, coated, and cover papers.

COMBINE—No. 238,106. John H. Davis Company, San Francisco, Cal. For sack twine.

VELVETENE—No. 245,700. American Tissue Mills, Holyoke, Mass. For crepe paper.

COTOLINT—No. 242,762. Wortendyke Manufacturing Company, Richmond, Va. For toilet paper, paper towels and napkins.

COCKATOO.—No. 242,760. Strathmore Paper Company, Mittineague, Mass. For writing and printing paper.

MAGNET KRAFT, No. 236,852. Reliance Paper and Twine Mills, New York City. For wrapping paper, marking and pattern paper, and tissue paper.

BIRMINGHAM SCHOOL, No. 239,791. Birmingham Paper Company, Birmingham, Ala. For writing paper, drawing paper, tablets, and composition books.

RUBBA STEN, No. 240,986. Lion Typewriter Supplies Company, Limited, London, England. For stencil paper.

SPONGEE, No. 241,874. Continental Paper & Bag Mills Corp., New York City. For paper towels.

SURETY SAFETY, No. 242,033. Walther & Co., Inc., New York City. For safety paper such as is used for bank checks.

WRITEX, No. 242,321. Wallace Addressing Machine Company, Inc., New York City. For stencils.

CHAINDEX, No. 242,618. Rand Kardex Bureau, Inc., Tonawanda, N. Y. For blank and partially printed cards and forms for indexes, indexes consisting of blank or partially-printed forms or cards, index cards of the articulated type, and case frames and holders for index cards.

HYPO, No. 243,470. American Lead Pencil Company, New York City. For carbon paper.

The Age of News Print

[FROM OUR REGULAR CORRESPONDENT]

MADISON, Wis., March 24, 1927.—"The power of linking past to present, which gives each generation the opportunity to start its climb from the shoulders of the preceding generation, is a fundamental distinction between man and the so-called lower animals, some of whose other attributes are superior to those of man," declared R. S. Kellogg, Secretary of the News Print Service Bureau, New York, speaking to the Rotary Club here today upon "The Age of News Print."

"It is a far cry from the charred stick and cavern wall to the machine which makes a thousand feet of paper a minute in a sheet a dozen feet wide, and to the printing press which delivers newspapers at an even more rapid rate," said the speaker. "There was an age-long search for material upon which records might be preserved, the culmination of which was paper. Only by means of a cheap, easily transported recording material did the diffusion of accumulated knowledge and experience become possible. Yet up to a little more than a century ago, paper-making was a slow, laborious hand process, not much more rapid than at the time of its invention in China 1700 years earlier. Now one man with the aid of modern machinery can make 7,000 times as much paper in a day as did Ts'ai Lun.

"Paper-making is an ancient art, but the newspaper is a modern development. Benjamin Franklin listed but 25 newspapers in North America in 1771, and none was of much size or circulation. Now more than eleven billion copies of daily and Sunday newspapers are published in the United States during the course of a year. A 200-page issue is no rarity on our doorstep on Sunday morning and 50-page dailies are common. This is why 3,400,000 tons of news print paper was used in the United States last year out of a world consumption of some 6,200,000 tons.

"Yet paper was scarce and costly until little more than fifty years ago, when a new raw material in the shape of wood was introduced. Modern news print is strictly a forest product, and, although he seldom realizes it, the newspaper reader has a very real interest in forest protection. The President has proclaimed Forest Week for the last of April and the Governor General of Canada has done likewise in order that the public may more fully grasp the vital importance of conserving our timber supply."

Zenas Crane Fund For Higher Education

[FROM OUR REGULAR CORRESPONDENT]

DALTON, Mass., March 15, 1927.—A corporation for the purpose of helping Dalton boys and girls obtain a higher education known as the Zenas Crane fund is now in effect and is another mark of the generosity of the Crane papermaking family in this town. The corporation is known as the Zenas Crane Fund for Student Aid, Inc., and was created in memory of the late Zenas Crane by Mrs. Zenas Crane, Mrs. Samuel G. Colt, a daughter, Z. Marshall Crane and Charles K. Crane, sons. There will be $5,000 available each year for such students. The fund will be administered by a board of trustees organized as follows: President, Charles F. Sawyer; Treasurer, John H. Bellows; Secretaries, Theodore M. Pomeroy, Andrew M. Camarab and Mrs. Cora Hitt Smith.

Howard Paper Co. Threatened by Fire

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, March 22, 1927.—What threatened to be a serious fire at the plant of the Howard Paper Company, Urbana, last week, was extinguished with a loss of not more than $500, according to the report of the fire department.

The department responded promptly and by unusually effective work checked the flames. The Howard bond paper mills owned by Maxwell Howard and associates, who are the owners of the Aetna mills in Dayton and the Maxwell mills in Franklin, are the largest of their kind in this section and constitute Urbana's largest industry.

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FOREIGN PAPER DEMAND SLOWER

Exports of paper and paper products from the United States during January reached an aggregate value of $2,123,682, according to the Paper Division of the Department of Commerce. This figure represents a decrease of approximately 10 per cent in comparison with December, but was practically on a level with the value of the January, 1926, shipments. Exports of book and wrapping papers, boards, and a number of paper specialties were under those of the preceding month. On the other hand an improvement is noticeable in shipments of news print, wall paper, writing paper, and envelopes. Compared with the corresponding month last year, the chief gains appear to have been in the better grade lines, such as book papers, greaseproof wrappings, tissue, crepes, and writings, and also in a number of specialties such as wall boards, envelopes, bags, and boxes and cartons. Exports of board products during January were about the same, decreases in the volume of shipments of boxboards, vulcanized fiber and building papers being more than offset by increases in shipments of bristols and other paper and strawboards.

Paper base stock was exported from the United States during January to the value of $355,024. The largest item in this group were rags and stock other than wood pulp which amounted to 66,001 tons, valued at $214,877. The remaining shipments consisted largely of sulphite pulp and pulpwood.

Imports of news print, which represent the bulk of the United States paper imports, underwent a slight reduction during January as compared with the previous month but exceeded those of the corresponding month in 1926 by approximately 30 per cent. Eighty-eight per cent of the aggregate receipts, amounting to 148,306 tons valued at $11,028,972, came from Canada. Other leading sources of supply were Sweden and Newfoundland, which furnished 37 per cent and 31 per cent, respectively, of the remainder.

Imports of other classes of paper and paper products were also slightly under those of the preceding month but at the same time show a rise in value as compared with January, 1926. While this increase was small, it was fairly well distributed among the various classes, decreases occurring only in receipts of pulp boards, surface-coated paper, wrapping paper, and paper boxes. Imports of miscellaneous papers and paper products, which were valued at $234,718, were nearly 15 per cent under those received during the same month last year.

Imports of paper base stocks during January exceeded the December receipts by 7 per cent and those of the corresponding month in 1926 by 17 per cent. The heaviest increase occurred in receipts of pulpwood and sulphate pulp, which in each case were double the amount received during January of last year. Imports of sulphite pulp were about the same as during either of the other two months under discussion, while imports of mechanical ground wood and rags and other paper stock fell below either the December or January, 1926, shipments. Imports in this group during January reached a total value of $11,812,236, of which $1,403,336 represented pulpwood and $10,408,900 other paper base stocks.

COMMODITY PRICES DECLINE

Wholesale commodity prices in all important industrial countries, excepting those whose currencies are not on a gold basis, have declined consistently during the last two years, although the years 1925 and 1926 were a period of general stabilization and improvement.

This, according to the National Industrial Conference Board, parallels to an extent the experience in the United States during 1925 and 1926 when American industry was confronted with the novel phenomenon of declining commodity prices during a period of increasing industrial activity. In the United States, moreover, commodity prices during this period declined in the face of rising wage earnings.

While many different factors enter into price fluctuation, the practically uniform lower world price trend during a period of general improvement reflects, in the view of the conference board, generally greater economy in production, and by that token augurs well for the immediate future of world business conditions.

The average annual rate of decline in commodity prices for 1925 and 1926, according to the analysis made by the conference board, in the United States was 4.4 per cent; in Canada 4.8 per cent. It was considerably greater in the United Kingdom, where, however, considerable business disturbance and stagnation occasioned by strikes obscure the picture of general conditions, the average annual decrease amounting to 8.4 per cent. Stability is reflected in the trend of commodity prices in Germany, Holland, Sweden, Australia and Japan, where the annual rate of decline in commodity prices for 1925 and 1926 was as follows: Germany, 0.3 per cent; Holland, 0.8 per cent; Sweden, 0.9 per cent; Australia, 0.2 per cent; Japan, 1.2 per cent, and India, 1 per cent.

Severe fluctuations during the two years occurred in Belgium, reflecting that country's struggle with inflation, checked during the last year by the stabilization of the currency at a new gold level. The annual rate of increase in commodity prices for 1925 and 1926 in Belgium amounted to 29.6 per cent. Commodity prices in France, where currency inflation during the two years was still the outstanding economic problem, rose at an average annual rate of 9.4 per cent in 1925 and 1926. Italy, likewise subject to inflation, experienced commodity price increases averaging 1.7 per cent in 1925 and 1926. In China, where political conditions have recently considerably disturbed business conditions, commodity prices increased an annual average of 1.5 per cent for the two years.

As compared with the pre-war, or 1913, level, commodity prices in all the countries named at present are considerably higher. In the United States they were, in December, 1926, 47 per cent higher; in Canada, 51 per cent; in the United Kingdom, 46 per cent; in

France, 527 per cent; in Germany, 31 per cent; in Italy, 581 per cent; in Japan, 201 per cent. In Belgium they were, in October, 1925 (the latest figures available), 759 per cent higher; in Holland, 39 per cent; in Sweden, 46 per cent; in Australia, 58 per cent; in India, about 50 per cent, and in China 64 per cent higher than in 1913.

R. S. Kellogg Speaks at Madison

[FROM OUR REGULAR CORRESPONDENT]

MADISON, Wis., March 23, 1927.—"Advertising is a billion-dollar industry in the United States," said R. S. Kellogg, Secretary of the News Print Service Bureau, New York, speaking today at the luncheon of the Advertising Club, "and new uses for it are constantly being developed. We have become so used to the salesmanship of the printed word that we instinctively have faith in the uniformity and reliability of nationally advertised products and we are greatly disappointed when they fail us. The organization which undertakes a national selling campaign has given a hostage to respectability and dependability.

"Newspapers carry a very large proportion of the advertising message and their use is steadily increasing. There is a copy of a daily newspaper published for every three persons in this country, to say nothing of two-thirds as many Sunday issues and other publications. Notwithstanding the tremendous growth of the city papers and their wide rural distribution, there are still some thirteen thousand weekly newspapers in the United States which perform a vital function in the life of their communities, which cannot be duplicated by their larger contemporaries.

"The total volume of newspaper advertising last year filled not less than seven million acres of newspaper space, and that should be spread enough to satisfy the most ambitious copy writer. This was about half our total use of news print paper, which has now mounted to 58 pounds per capita, compared with only 15 pounds as recently as 1900. We use more news print paper than all the rest of the world combined. The careless reader who glances over his daily and throws it aside has no realization of the truly modern miracle of coordination and accomplishment, all the way from the spruce tree in the distant forest to the newsboy on the street corner, which gives him for two or three cents a resume up to the hour of world happenings in industry, politics, education, science and religion."

Strathmore Paper Co. Buys Agawam Division

[FROM OUR REGULAR CORRESPONDENT]

HOLYOKE, Mass., March 22, 1927.—Formal announcement was made at the offices of the American Writing Paper Company Friday by President S. L. Willson of the completion of the negotiations for the sale of the Agawam Division of that Company in Mittineague to the Strathmore Paper Company of Mittineague and Woronoco. These negotiations have been in progress for some little time giving premature reports of the sale of the property on one or two occasions.

The new owners buy the land, mill and water rights but the machinery will be retained by the American Company which will remove it to Holyoke. The Agawam Division was formerly owned by the late D. B. D. Rising who sold it to the American company. This sale is in line with the policy of President Willson to sell off the outside mills. of the company, retaining only the Windsor and the Platner & Porter Divisions of the outside plants.

Ask Receiver for New Castle Paper Corp.

NEW CASTLE, Pa., March 21, 1927.—W. H. Shipler and others have made application for the appointment of a receiver for the New Castle Paper Products Corporation, and a hearing on this matter will be held at the Court House in New Castle on Wednesday, March 30, 1927. William McElwee, Jr., and John P. Lockhart are attorneys for the plaintiffs.

Northern New York Mills Turn to Specialties

[FROM OUR REGULAR CORRESPONDENT]

GLENS FALLS, N. Y., March 21, 1927.—The trend of news print mills transferring to Canada which has been decidedly pronounced for the past few years has had its effect on the mills of northern New York, many of which are now making specialties in place of news print, finding it impossible to compete with the cheap wood supply and continuous water power of Canadian mills.

A recent survey of the northern New York mills reveals that news print is still being turned out wholly or in part by Finch, Pruyn & Co., Glens Falls, Hudson River mill of the International Paper Company, at Corinth, Oswegatchie Paper Company, at Gouverneur, Algonquin Paper Company, of Ogdensburg, DeGrasse Paper Company, at Pyrites, Gould Paper Company, at Lyon Falls, Hanna Mills, at Norfolk, Norwood and Raymondville, and the St. Regis mill at De Feriet, the latter operating two machines on news print and two machines on catalogue paper.

The Black River mill of the St. Regis Company is now making packers' wax and wrapping paper. The two mills of the Sherman Paper Company, at Felts Mills and Great Bend, are turning out colored news and half tone, respectively.

At Carthage the trend toward specialty papers has been quite noticeable and only one mill at that place is now producing any news print. Wrapping paper, tissue and catalogue paper form the bulk of the output of Carthage mills at present.

Lightweight bond paper and cash register paper is being manufactured by the Brownville Paper Company, of Brownville, while the Harmon Paper Company, of the same place, is turning out hanging or wall paper.

The Racquette River Paper Company, Potsdam, is making specialties, the Warren Parchment Company, of Dexter, glassine paper, and the Dexter Sulphite Mill wrapping paper.

In the immediate vicinity of Glens Falls the movement towards Canada of the news print industry has had its greatest effect on the International mills in the Hudson River Valley, notably Fort Edward and South Glens Falls, which are now undergoing conversion to specialty mills, following out the policy announced by President Graustein last year of making its Canadian mills the principal source of its news print supply and converting its American mills into specialty mills or power plants. The Fort Edward mill is now being changed to make bond and wrapping paper and the South Glens Falls mill to make artificial cotton. Unconfirmed rumors have been current that some changes are being planned also at Corinth, which plant was at one time reputed to be the largest news print mill in the world.

The trend from news print to specialties will not prove detrimental in the opinion of competent observers. The chief effect, it is said, will be that female labor will replace the men in many of the departments, particularly at Fort Edward and South Glens Falls.

L. T. Stevenson Discharged as Receiver

[FROM OUR REGULAR CORRESPONDENT]

PITTSFIELD, Mass., March 22, 1927.—Louis T. Stevenson, receiver in the equity case of the Lee National Bank and others against the Mountain Mill Paper Company of Lee has been discharged at his own request by Judge William A. Burns of the State Superior Court. This action by the court was taken with the approval of the reorganization committee. The Fidelity and Deposit Company of Maryland has also been released as surety.

The bill in equity asking for the appointment of a receiver was filed December 8, 1923,. The petitioners with their claims were the Lee National Bank, $12,500; Lee Electric Company, $49.73; Clark Aiken Company of Lee, $172.41.

On October 19, 1926, Judge E. B. Bishop of the Superior Court handed down a decree approving of the transfer of the assets of the old concern to the new company called the Mountain Mill Company. The recent action clears the deck further for the new company.

COOPERATION

with--

the users of ROSIN SIZE

AS KALBFLEISCH views it there are two functions we should perform for paper mills—supply a quality Rosin Size and offer an engineering service which enables you to secure the highest type of results.

Kalbfleisch Rosin Size has met the needs of manufacturers because it fully meets your requirements. That there is a demand for a size of Kalbfleisch-quality is indicated by the fact that, in the four years since its introduction, Kalbfleisch Rosin Size sales have increased manyfold.

The advantages of the DeCew Sizing System appeal to many manufacturers, who use it in connection with Kalbfleisch Rosin Size. We also sell Size without System. Results from both have been proven highly satisfactory.

The

KALBFLEISCH *Corporation*

200 Fifth Ave. New York City

FACTORIES:

Erie, Pa. Brooklyn, N. Y. Kalamazoo, Mich. Elizabeth, N. J.
Chattanooga, Tenn De Quincy, La. *(under construction)* Waterbury, Conn.

Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G. MacNAUGHTON, Secretary

Fiber Composition and Paper Durability

New York, March 15, 1927

Editor *New York Times*:

May I call your attention to an article in a recent issue of *The Times*, which related the purpose of your company to publish a few copies each day on a paper made of 100 per cent rags in order that the historical value of the facts recorded in *The Times* might be preserved to posterity through the medium of the long life of the paper used in the special editions. The plan to preserve each day's issue of *The Times* for many, many years is indeed commendable, but certain statements were made in the article which are inclined to be misleading and perhaps harmful, though I am sure unintentionally, to a considerable portion of the paper industry.

In your article, which was later reprinted in one of the paper trade journals, appeared the following:

"Rag fibers, properly treated, approach very closely to the pure cellulose state, whereas wood fibers no matter how carefully prepared, contain many impurities which disintegrate rapidly. If the refining process is carried far enough to overcome or remove these impurities, the fibers themselves break down and become worthless. Not so, however, with the rag fibers."

The possibility of misunderstanding in connection with this statement and also on the whole subject of permanency of rag and chemically pure wood fibers, is evidenced by the following from a report on the Selection of Paper, issued by a well known trade association so recently as January 13, 1927:

"Rags in paper make it more durable in direct proportion to the amount of rag fiber present. Rag paper has a content of 50 to 100 per cent rag fiber and when exposed to considerable handling, changing temperature and moisture, becomes discolored and brittle after a time. This occurs in all paper containing sulphite pulp but only to a serious extent in 100 per cent sulphite pulp paper."

There perhaps is a belief held by many otherwise well-informed people that no paper made from chemical wood pulp, however carefully prepared, could compare in durability with one made from rags whatever the quality or method of preparation.

There is a growing interest in that quality in paper which relates to the paper's durability. The desirability of a proper knowledge of some of the important factors on which this quality depends, makes it advisable to present this statement on the subject, quoting the seasoned opinions of recognized authorities in the realm of cellulose, the chief basis of paper.

Prof. Ernst Kirchner of Germany, one of the internationally known authorities on pulp and paper technology and author of a number of works on the subject, stated in one of his books published in 1907 that he had a sample of paper made from unbleached sulphite that had been manufactured in Sweden more than 30 years previously and which had fully retained its color and splendid strength. Professor Kirchner explains that the durability of this paper must be due to careful removal of the chemicals from the fibers at the time of manufacture.

Professor Herzberg, who was for a great many years director of the Government Paper Testing Laboratory at Berlin, reported on tests of papers at the time they were received at his laboratory and again fifteen years afterwards. Comparing the strength of the papers at these two periods he says that it is not possible to state that the papers made partly or entirely of wood cellulose fiber are inferior in durability to paper made from rag fibers. He also says that the chemical wood pulps as prepared at the present time are no longer to be regarded with the distrust with which they were considered years ago.

Reporting on work carried on at the Swedish Testing Institute at Stockholm and later in United States, Mr. Gösta Hall, in a paper before the Technical Association of the Pulp and Paper Industry on Permanence of Paper, stated regarding tests on paper after eleven years that sulphite and rag papers had deteriorated to practically the same degree, which confirmed the tests which Professor Herzberg had made previously in Germany.

Prof. E. Heuser, Hawkesbury, Ontario, formerly professor of cellulose chemistry at Darmstadt and a world authority in this field, in a communication on the subject says: "In the comparison between chemical wood pulp paper and paper made from rags, to which I have given considerable study, the results I have found entirely confirm the opinions expressed by Professors Kirchner and Herzberg.

"In discussing this question there are two deductions which are quite different and which are not sufficiently kept separate. These are the physical strength and the resistance against chemical influences. It is the latter only which is to be considered so far as the permanence or durability of the paper is concerned.

"The chemical treatments of many kinds such as with acids, oxidizing agents, etc., which may be carried out, show that there is no difference in the behavior of fibers from rags and chemical wood fibers. It is, of course, assumed that the isolation of the fiber from wood by the cooking process and the subsequent purification by bleaching have been done carefully.

"It is also assumed that no substances are used in the paper which are less resistant against chemical influences than the fiber itself and that injurious chemical residues are eliminated from the pulp.

"Since in the preparation of rags for paper they must be boiled and bleached, the paper made from rags would have little per-

manence if the operations and precautions are not taken with equal care."

Dr. Harold Hibbert, professor of industrial and cellulose chemistry at McGill University, Montreal, who is internationally known and a recognized authority on all subjects related to cellulose, says: "I am in general agreement with the following statement: 'Although there are samples of paper made from rags which are hundreds of years old and it is only about fifty years since the sulphite process was discovered and paper was made from chemical wood pulp, we must remember that the quality of rag fiber generally used for paper was formerly of much better quality than it is today.

" 'Since the discovery of chlorine and the development of the modern steam laundry processes, the quality of rag fibers has become materially lowered while at the same time, due to a better knowledge of the technique of chemical wood pulp processes the quality of the product is better than ever before.' "

Doctor Hibbert continues: "There would seem to be no reason why a paper made from sulphite pulp, manufactured under carefully controlled conditions, should not yield a durable permanent product. . . . I think it must be admitted that paper made from unbleached, undyed, pure cotton rags would probably be a more durable product than that from sulphite pulp, but under manufacturing conditions, as they exist today, I feel that in all probability the rags commonly used for the manufacture of paper will very likely have been subjected to bleaching, dyeing and other chemical operations likely to bring about profound changes in the nature of the cotton, and to thus influence in a very marked manner the durability and permanence of the paper made from it."

In referring the matter to the Paper Section, U. S. Bureau of Standards, the director, Dr. George K. Burgess, states that there is a constantly increasing demand for information on the subject of durability of papers and that the Bureau realizes the need for intensive research over a period of years in order to determine the probable life of papers of different compositions. Owing to the press of other problems of more immediate importance only a limited amount of work has been done in this field by the Bureau up to the present time.

The opinions of the recognized authorities quoted indicate clearly that there is no foundation for the apparent distrust with which the quality of chemical wood pulp papers is regarded by some people today. Without a doubt the statements which appear from time to time in the press to the effect that papers made from wood pulp are less durable than rag papers are caused by a confusion on the part of the laymen due to the fact that there are various kinds of wood pulps of entirely different qualities, depending upon the method used in their manufacture.

The mechanical wood pulp or groundwood pulp is obtained by mechanical disintegration of wood and consequently contains all the substances of the wood which are subject to deterioration. This type of wood pulp therefore only finds its way into papers of which permanence is not required, for instance in news print papers. On the other hand the chemical wood pulps are the products of careful chemical treatments, the object of which is to remove the impurities of the wood, thereby isolating the cellulose fibers. Scientific investigations of recent years have brought out the fact that the cellulose contained in wood is identical to cotton cellulose and chemical wood pulps are rapidly replacing cotton in many important industries which are based on cellulose as a raw material.

Undoubtedly the best grade of paper with regard to initial strength and durability may be produced by very careful treatment of the very highest grade of new linen cuttings, but when one considers the average type of rags which are used today in the papermaking process, there is no reason to assume that the papers made from this raw material are superior to those manufactured from carefully prepared chemical wood pulp.

According to actual experience and the opinion of leading authorities, the durability of paper depends upon the condition of the fiber as it enters the processes, the control of the manufacturing processes and the absence in the paper of chemical residues, and not upon the name of the fiber.

W. G. MacNaughton,
Secretary of the Pulp and Paper Industry

Report of Committee on Cellulose

By W. E. B. Baker, Chairman

Systematic detailed study of the more theoretical phases of cellulose chemistry having in view the more direct application to paper manufacturing problems, although somewhat retarded or deterred in the past, now is entering upon the threshold of progress. This remark particularly applies to the status of the question in this country at present. Our Europeean contemporaries have led us by a few years, perhaps chiefly due to the lack of American literature on the subject of cellulose, as it is recognized that the developement of interest in wider circles and the production of literature are inseparable elements in progress.

New Books on Cellulose

The appearance of two very creditable treatises during the past year will doubtlessly prove a great stimulus to greater appreciation of and interest in cellulose. These books are The Chemistry of Cellulose and Wood, by Dr. A. W. Schorger, and the Chemistry of Wood, by Drs. Hawley and Wise. The former treats the subject of wood first as a unit and then deals with the individual cellulose and lignin in greater detail. The latter gives a critical and constructive review of the chemical data on wood and cellulose. Both are of great value to cellulose, pulp and paper chemists and technologists.

The committee is also fortunate in being in a position to supply an English version of Dr Kürschner's Zur Chemise der Lignin-körper, or at least of the principal parts of this work. The chairman recently obtained author's and publisher's permission to do this for the Technical Association, and it is hoped this work will be finished when the series of papers goes to press. This is of considerable importance particularly at present, not only because of the advantages of better understanding of lignin in connection with cooking chemical pulp but also because of the increasing interest becoming evident in the possibilities or reclamation of valuable byproducts from the solution of the encrusting matters, and the simultaneous elimination of stream pollution.

For papers for presentation at the meeting the Committee was fortunate in getting the cooperation of Professor Clark of the Massachusetts Institute of Technology to deliver a paper or lecture on The Application of X-rays, to the pulp and paper industry.

In this connection a somewhat related or analogous line of investigation is suggested, viz. high power radiations. The large "gap" existing in the scale between the magnitude of the shortest wave length of visible light radiation which we can use, and the wave length of the "softest" X-rays certainly indicates that somewhere between these limits are radiations which can be used to great profit in gaining a better understanding of structural factors in fibers of greatest influence in determining quality and strength characteristics in the finished sheet of paper. The data thus gathered by the use of these missing links in the radiation scale will also very likely greatly assist in the more tangible realization of the true interpretation of the X-ray diagrams of the fibers.

Effect of Moisture on Paper*

By Joseph H. Burgen, Junior Member TAPPI, Chemist American Writing Paper Co.

Probably the most serious single source of trouble to the lithographers, printers and converters is found in the curling or buckling of paper. I am glad to say that any troubles printers may have been experiencing will probably be lessened appreciably as the warm weather comes and artificial room heating removed. The importance of moisture and humidity control in relation to the elimination of these difficulties is increasingly recognized throughout the trade and will be more universally applied within the next few years.

Relative Humidity Discussed

Relative humidity could involve a very technical study. It is hard to visualize and understand just what it means without becoming somewhat technical and hence uninteresting to many. I will try to explain very simply what is meant by relative humidity and how it affects paper and causes trouble which the paper maker can in no way remedy.

The terms "dryness" and "wetness," applied to air are purely relative and indicate the proportion of water vapor actually present in comparison with what the air could contain at the same temperature. At the dew point the air is saturated and the water is deposited as dew, mist, or even rain. It holds all the water it can. As the temperature rises the dew disappears and is held in suspension until the temperature is lowered when it is again deposited. This condition is observed in the early morning in summer. In the sweating of the tumbler of cold water we have another example of the existence of water vapor in the atmosphere. The ice water chills the air around the glass and the moisture is deposited. In the winter time you can see your breath when you breathe as the breath is warmer than the air and it condenses. From this we see the words "dry" or "moist" as applied to atmosphere have a purely relative significance depending upon the temperature. They involve a comparison between the amount of water vapor actually present and that which the air could hold if saturated at the same temperature. The ratio of these two quantities is called the per cent relative humidity. When we say a relative humidity of 65 per cent we mean that the amount of water vapor actually present is 65 per cent of what the air might have contained at the given temperature of say 70 degrees fahr. if it had been saturated.

The psychrometer is an instrument used for measuring relative humidity. It consists of two thermometers, one covered with muslin and kept moist with water. The rate of evaporation from the moist muslin depends upon the quantity of moisture in the air. The more rapid the evaporation of water the greater the cooling and hence the greater difference in the readings of the two thermometers.

It would be very easy for any printer or paper man to take a series of readings around his print shop and record the variation in temperature and relative humidity. It would be very interesting and enlightening to many to see the variation in the amount of water in the different rooms and realize how the paper is being dampened and dried through the converting processes. Tables are the measured humidities in parts of the paper mill.

Location	Temperature F.	Relative Humidity %
Drainers	70	85
Basement	72	82
Office	80	36
Outdoors (dry day)	84	37
Cellar	71	64
Outdoors (rainy day)	73	73

This tabulation affords an excellent illustration of the increase in humidity on lowering the temperature of the air, also of the variation with the weather.

* Given before Joint Section of Connecticut Valley Superintendents and Printing House Craftsmen, March 5, 1927, by Joseph H. Burgen, Junior member TAPPI, Chemist, American Writing Paper Company, Holyoke, Mass.

At various relative humidities paper holds different percentages of water and will absorb or give up water until it comes to equilibrium with the existing temperature of the room.

Relative Humidity %	Moisture in Paper %	
100	21.5	
90	13.5	
80	8.9	
70	8.4	Temperature 70° F.
60	6.5	
50	5.6	
40	3.4	
30	2.3	
20	1.8	

Paper on coming off the driers of a paper machine contains from 3 to 5 per cent moisture. Paper from the loft contains from 2 to 3 per cent moisture, depending on loft conditions. These moisture ranges are the ones that are suitable for the ordinary ranges of humidities ordinarily encountered.

When such paper is packed for shipping the moisture present in the sheet is evenly distributed. There is no curling as the paper in the finish-process has been seasoned under the normal atmospheric conditions for this period of the year and consequently there is no tendency for curling or waving as the paper is in equilibrium with the moisture conditions.

Effects in Storage and Printshop

Indoor Conditions: In general the tendency of a paper store house is to be several degrees lower in temperature than a print shop, where the warming stoves for stones, bunsens for copper plates and heating systems assist in raising the temperature during the working period. The heating developed during the day is highest at closing time. It must be remembered that when a room is warmed the quantity of moisture is not diminished but the humidity of the air is lessened because the saturation capacity of the air is so enormously increased. With the falling temperature at the closing time the moisture which had previously not been noticed is apparent in the form of dampness.

Weather Conditions: Apart from the system of heating and ventilation the amount of moisture in the air varies during the course of the day and year being at its maximum of absolute moisture in the summer at the hours of 8 a. m. and 8 p. m. Whilst the minimum occurs at 3 a. m. and 3 p. m. This is due to ascending currents of air which carry the moisture upwards. The relative moisture is on the average greater in higher than in lower latitudes; it is at its minimum in the hottest and maximum in the coolest parts of the day. It varies in different regions, being less in the center of the continent than near the coast.

Seasonal Variations of Relative Humidity

Weather Conditions: During the winter humidity conditions in the press rooms and print shops are particularly bad for while the average outdoor humidity may be fairly high (50-60%) the small amount of moisture contained in the air at the low temperature encountered during the winter months causes a serious reduction in relative humidity on being heated inside the building. As an example to illustrate this point, the air at 40 degrees fahr. and 50 per cent relative humidity, which are normal winter conditions contain but 18 grains of moisture in a pound of dry air. on heating such air to 75 degrees without changing the actual amount of moisture present the relative humidity has been reduced from 50 per cent to 15 per cent because the capacity of the air for holding moisture has been so enormously increased by raising the temperature.

For this reason, during the winter months the floor should be sprinkled with water at frequent intervals or buckets of water should be allowed to evaporate on radiators, etc. unless other more adequate arrangements for humidification are provided.

Summer Conditions: In the summer conditions frequently are just the reverse. At the temperatures prevailing in the summer

even with normal humidity, there is a considerable quantity of moisture available in the air. When this air is brought inside and cooled to any extent, especially if it enters a cool cellar, the temperature is rapidly reduced, the quantity of moisture remaining constant, the humidity must increase. Providing the temperature drop is great enough, especially near walls or any cold objects the air will contain more water than it can hold at that temperature and the vapor will be deposited in the form of a fog or damp, which will settle out on the paper disturbing the equalized moisture conditions and resulting in curls and buckles.

An example based on figures perhaps will help make this idea clearer. A comfortable, normally hot day in the summer would have a temperature of 90 degrees fahr. and a humidity of 60 per cent. It is only necessary to drop the temperature of air at this condition to 74 degrees fahr. to cause over 100 per cent humidity and consequent condensation of water vapor.

From this example the slight change in temperature required to completely transform the humidity conditions is evident. If, therefore, in the absence of adequate methods of controlling humidity, differently behaving paper is run on a day suited for its condition, better results will be obtained.

Effect on the Paper

Even though the temperature drop was not great enough to cause super-saturation of the air, it is enough to greatly increase the relative humidity which will affect the paper. It must be borne in mind that the moisture content of a sheet of paper is dependent not only on the relative humidity of its environment but also on the temperature. It is, therefore, not good practice to use cellars for storerooms or to subject the paper to great temperature and humidity change without inviting curling and buckling difficulties.

What has this talk on humidity to do with paper curling and buckling? Just this—Paper has the property of absorbing and giving off moisture until the moisture in the paper and the moisture in the atmosphere are in equilibrium. The behavior of paper under given atmospheric conditions is, therefore, dependent on the relative amounts of water present in the atmosphere and in the paper. That makes it impossible for the paper maker to manufacture paper that will satisfy all conditions in the trade. No two rooms have the same operating conditions and no two localities the same outdoor conditions. Therefore, paper cannot be made that will not curl under certain conditions.

Curling of Paper

The so-called curling of papers is generally found to be in one direction—toward the wire side as a result of certain conditions encountered in forming the sheet of paper on the paper machine wire.

Distribution of Fibers: In forming a sheet on the traveling wire the stock suspension surges out on the wire at a considerable velocity, dependent on the head of water behind the slices and the speed of the machine. The natural flow of the stock would tend to induce the fibers to arrange themselves mostly lengthwise. A lateral shake, therefore, is given to the traveling wire to felt the fibers together. The stock nearest the bottom attaches itself to the wire before the effect of the lateral shake can distribute the proper proportion of the fibers in a horizontal direction. The middle and upper layers contain a larger proportion of horizontally lying fibers which tends to make the sheet of more uniform structure in each succeeding layer from the bottom. This more equal distribution of lengthwise and crosswise fibers near the top of the sheet of itself resists any curl in the direction toward the top of the sheet.

Effect of Short Side: In addition the stock next to the wire settles against the smooth surface of the wire, thereby making the wire side of the sheet comparatively level. On the top of the sheet, however, the stock settles in clots, forming microscopic hills and valleys on the top surface or felt side of the sheet. In spite of the smoothing effects of the press rolls and calender rolls in smoothing the microscopic lumps into the sheet of paper the felt side of the sheet has more surface and consequently is longer than the wire side. This fact of itself is responsible for a tendency of the sheet to curl toward the wire or shorter side the instant the surface becomes moistened. Other things being equal a sheet made from shorter stock will curl more easily under variable humidity conditions than one made from longer stock.

Effect of Shrinking: It has been pointed out above that the fibers in greater proportion tend to arrange themselves lengthwise in the web resulting in a distinct grain in the paper. It is a well known fact that the fibers expand far more diametrically than they do lengthwise on being moistened thereby giving rise to a wave in the direction of the machine or grain.

Furthermore when the water is removed from the web during drying, there is a tendency for the traveling and gradually drying web to contract in width, this contraction lengthwise being restrained by reason of the tension created by the traveling and drying apparatus, but being unrestrained in the cross direction.

As a result of these two factors a sheet will always expand more in the cross grain direction than in the lengthwise on being exposed to changing moisture conditions thereby causing any curling to take place in the direction of the grain or machine direction.

Other Factors in Manufacture

Effect of Sizing: The effect of the sizing on the natural curl of the paper is of considerable importance. Sizing tests invariably indicate that the wire side is slacker sized than the felt side due to the action of the suction boxes in removing the rosin size precipitate from the fibers. This is particularly true where the stock is free. As a consequence, the sheet will absorb more glue or gum on the wire side which on being subjected to moisture or drying is more flexible than the stock and will tend to cause a curl in the direction of the bottom or wire side of the sheet.

Effect of Beating: The slowness or condition of beating that the stock has been subjected to also has an important influence on the curling.

A paper stock that has been hydrated or made "slow" shrinks considerably on being dried which makes the sheet more susceptible to stretching on being moistened. Another property of a hard, slow stock is its lack of absorbency which does not permit the water to pass through the sheet but rather to hold it on the outside surfaces thus rendering it more susceptible to curling.

Effect of Storage Conditions

Storing and Piling of Paper: If the paper is allowed to remain in the print shops and press rooms in high piles in either a drier or more humid atmosphere, the exposed surfaces of the paper gradually assume the moisture condition corresponding to the prevailing humidity conditions. Inasmuch as the piles are tightly packed it is only the top surface and edges of the sheets that have an opportunity to adjust their moisture content to these conditions and consequently with a condition of variation in moisture content between the edges and inside of the sheet, waving and buckling is inevitable.

Another consequence of the piling is a result of the weight of piles, the weight being concentrated at the center of gravity of the pile, the center causes an uneven pressure on the center and edges of the pile which has a further tendency to cause wavy edges.

An example of the effect of uneven distribution of moisture through a sheet of paper is available in a comparison between piles of stored ledger paper and a cockled bond. The ledger paper having a high finish will be packed very tightly and closely and consequently will be wavy and buckled. The cockled bond, however, because of the cockle will not pack closely in a pile of the same height, the air is allowed into the pile more and as a result very little buckling is observed.

In order to eliminate these effects outlined above it is suggested that the piles of paper be made lower and the paper crossed with alternate layers in different directions. In fact any procedure to thoroughly aerate the paper cannot fail to help eleminate the waving and distortion of the edges.

Testing the Yellowing of Papers*

Papers which have been stored for any length of time will always discolor to a less or greater extent, especially when they are exposed to light, air and warmth. In the absence of light or warmth, some papers remain unchanged for a long time. Papers made from fibers containing lignin will yellow the quickest and papers containing groundwood yellow with a very short exposure to light. The more lignified fibers there are present, the more marked is the yellowing. A similar thing occurs when a dye is used which is not light fast, but yellowing also occurs in papers which have no lignin and no unstable dye.

In order to test the tendency to yellow with age, test papers can be exposed to sunlight with papers of known resistance to yellowing, but such tests take considerable time. One can also work with electric arc lights which are rich in chemical rays and have the advantage of being available at all times, but results are not always accurate.

Klemm's Method

According to Klemm, soap-like compounds of iron with rosin and fatty-bodies cause a yellowing of lignin-free papers in proportion to the amounts present. For dissolving out these compounds, Klemm recommends a mixture of alcohol and ether (2:1). After extraction, as in a soxhlet, the iron content of the extract is determined by any of the known methods. In many cases a colorimetric method may be used, using ammonium sulphosyanide and a solution of iron chloride or iron ammonium alum, as worked out by Lunge and Keler. In this method an accuracy of 0.00001 grams of iron can be obtained from the 5 cc. of the test extract. The amount of iron found should not be more than 0.00002 grams. If more iron is found when 5 cc. corresponds to one gram of paper, one must dilute accordingly or estimate the iron in another way. The amount of iron present in a paper in the form of iron soap may vary from 2 to 100 parts per million on the weight of the paper. By using the iron colorimeter of the firm of Schopper in Leipzig, one can eliminate the titration of the iron solution.

The estimation of the iron can be carried out by extraction with caustic soda and this is simpler but less accurate than the ether-alcohol extraction. On account of the ease with which decomposition enters, this method is only applicable for a quick, approximate test. Boil 1 gram of paper in a test tube with 5 cc. of 1 per cent alcoholic caustic soda, pour the yellow liquid, which now contains the organic-iron compound, into another glass, and add nitric acid to acid reaction whereby the rosin added for sizing is precipitated. Then add about 2 cc. of a 10 per cent solution of ammonium sulphocyanide which will color the solution more or less red according to the amount of iron present. Finally shake with 4 cc. of ether to extract the color from the water solution. The darker the ether, the greater will be the tendency for the paper to turn yellow.

Klemm has tested a large number of lignin-free papers by these methods and the results were parallel to those obtained by light exposure, showing the relationship between light discoloration and the iron test.

Method of Wittels and Welwart

The method used by Wittels and Welwart for the estimation of the iron content of a paper is more accurate than the ones mentioned above and is easily manipulated. The paper ash is fused with potassium bisulphate, the melt is dissolved in water and acidified with sulphuric acid. The iron is then reduced to the ferrous form by putting a palladium spiral laden with electrolytic hydrogen into the solution, protected from air, and titrating the ferrous iron with one-hundredth normal potassium permanganate. This process was worked out by Gintl and is fully described in the Zeitschrift fur Angewandte Chemie, 1902, 398.

Iron in Photographic Paper

In photographic papers especially a large amount of iron, evenly distributed, is less harmful than a smaller amount appearing as spots and lumps. In order to study the uniformity of distribution of iron in such papers, the paper may be laid in a hydrochloric acid bath of potassium ferrocyanide. The blue color brings out the distribution of the iron. While this reaction is very sensitive, it is not accurate when the iron is present as metallic iron in a finely divided condition. In this case the following method is recommended:

Let 100 grams of dry gelatine swell for two hours and pour off the clear water. Then melt the gelatin in 1,000 cc. of distilled water on a water bath and cool to 50 degrees Cent., during which time add 4 grams of citric acid dissolved in 10 cc. of water. Then 20 grams of silver nitrate is dissolved in 50 cc. of distilled water, heated to 50 degrees Cent., stirred until solution is complete, and added to the gelatine solution. The mass, when cooled to about 40 degrees Cent., is filtered through muslin or filtering gauze and, in diffused light, poured on to the paper. While pouring the four edges of the paper are bent up to form a cup, after which the paper is lifted by one corner and the excess gelatin is allowed to drain off of the lower corner. The sample, thus coated, is dried in a warm, dust free place. After a few minutes, if it contained metallic particles, they will show themselves as dark spots.

Schoeller's Studies

Recently Schoeller has made an exhaustive study of the yellowing of lignin-free papers and has come to some conclusions of value to paper producers and users. In order to have pure test materials, Schoeller worked with his own hand-made papers. Parts of them were exposed to sunlight and parts to a drying oven heated to 95 degrees Cent. In both cases the relative amounts of yellowing were in the same order. With heated papers the colors changed rapidly,—sized, heated papers usually after three to five hours,—giving one a quickly and easily carried out test of the tendency of papers to yellow with age. Schoeller made such tests on papers taken from all stages of the paper-making process and found yellowing due to the chlorine of the bleach and more especially to the rosin sizing. Freshly bleached and easily washed stock is stable, poorly washed and stored stock tends towards yellowing. Unsized, bleached stock will yellow with the use of hypochlorous acid which oxidizes stock strongly. Rosin sizing shows itself in all cases as the essential factor in yellowing. If the size is extracted from the paper by alcohol and ether, the bodies which cause yellowing are removed and the paper is more or less restored to its original color, a proof that the rosin sizing is the carrier of the factor causing yellowing. Iron resinate is very sensitive to light and if a paper contains a large amount of it, a decided yellowing with age will occur, but even when only a small amount is present, a tendency towards yellowing is apparent. Schoeller recommends the use of iron-free alum in order to decrease the formation of iron resinate to a minimum.

Further Experiments

In the course of further experiments, he showed that the property of the rosin to cause yellowing was not a matter of oxidation since it was also observed when he worked in an atmosphere of nitrogen.

As a protection against the yellowing from rosin, he suggested oxidation of the iron in the rosin by means of chlorine. Suspend the finely divided rosin in water acidified with hydrochloric

* From Wochenbl. f. Papierfab. 57, No. 47, pp. 1299-1301. Translated by Dr. Jessie E. Minor and W. Hendrich, No. Wilbraham, Mass.

acid and extract with a sufficiently strong solution of calcium hypochlorite.

Schoeller recommends for making a paper which will not yellow the use of all rag stock, no wood pulp. Rags may be bleached rather strongly but should not be long stored in the bleaching liquor. Sizing should be done with chlorinated rosin or stearin size and, as a precipitating medium, iron free alum should be used.

Zschokke has also carried out experiments on the yellowing of paper and he has reached the same conclusions as has Schoeller. Zschokke saw also in rosin size the chief cause of the yellowing of lignin-free paper and considered it a chemical change of the rosin. The heating experiments mentioned are recommended as a quick method for estimating the tendency towards yellowing of a lignin-free paper, but it does not give a measure of the amount of the tendency towards yellowing.

Microscopical Analysis of Paper*

Report of the Sub-Committee on Microscopical Analysis—Paper Testing Committee TAPPI

By C. E. Libby, Chairman

The sub-committee on microscopical analysis was recently organized to undertake work on problems pertaining to methods for the determination of the fiber composition of paper and related products. Because of the recent organization of this committee it has little to report except a list of projects which have been proposed for investigation. The projects under consideration at the present time are the following:

Dot Method in Estimating Fiber Composition

1. Determination of the accuracy of the Dot Method of estimating fiber composition. This method has been proposed to eliminate the undesirable personal equation which enters to a large degree into many of the present methods of fiber estimation. The dot method is entirely mechanical and experience is not essential to its successful use. Several members of the committee have used it with very satisfactory results on certain products, notably roofing felts. However, its accuracy on the different classes of paper making fibers in their several states of subdivision has not been determined and it is the intention of the committee to make a complete investigation of the accuracy of the method before it is recommended for use by members of the Association. Test samples have been forwarded to the members of the committee for analysis by this method and a limited number of results have been reported. However, the returns are too meager to draw any conclusions relative to the accuracy of the method.

Weight Factors for Fibers

2. The committee expects to undertake further work on the determination of relative weight factors for fibers which are extensively employed in the manufacture of paper. Two sets of weight factors have already been determined and published, one by G. K. Spence and J. M. Krauss published in *Paper* on May 23, 1917, and the other by a Paper Testing Sub-Committee, J. H. Graff, Chairman, the results of which were published in Technical Association Papers Series 8 (1925). These two sets of factors are not in agreement in the case of many common fibers and the situation is further confused by the fact that several microscopists have developed factors of their own which they are using in preference to those which have been published. In view of these conditions it is felt that the microscopical committee may well devote considerable time to this problem in an effort to establish a set of standard factors for all the important paper making fibers and to determine the variables which may be expected to be involved in the employment of these factors. Owing to the detail involved in these determinations it is expected that an exhaustive investigation of this problem will require at least one year's time and probably longer, considering the limited time at the disposal of the members of the committee.

Study of Stains

3. It has been suggested that the committee investigate the possibilities of modifying some of the stains now being used for the less common determinations with the object of simplifying their application and increasing the probable accuracy of results. A specific stain recommended for consideration is Alexander's stain for the determination of bleached soda and sulphite pulp. It is also recommended that the committee develop a stain for distinguishing bleached sulphite and bleached sulphate pulps owing to the rapidly growing use of this latter fiber.

Relative Accuracy of Different Methods

4. Considerable difference of opinion exists relative to the limits of accuracy of the several methods of fiber analysis. At the present time the Technical Association Official Method of Fiber Analysis recommends that the percentages of the various fibers be reported to the nearest 5 per cent. It is probable that several methods of analysis give results well within this limit when a constituent is present in amounts of 1 to 10 per cent. It is also apparent that the probable error of a determination varies considerably depending upon the nature of the fibers present. The American Society for Testing Materials in a recent tentative standard for fiber analysis states that their method is accurate to within 10 per cent of the amount of any given individual constituent. Obviously this method of estimating the probable error allows too little variation in the minor constituent and too large a variation in the major constituent. The determination of the probable error of any accepted method of quantitative fiber analysis is a fertile field for investigation and it is hoped that the committee may be able to undertake this work at a later date.

Several paper laboratories have expressed concern lest the microscopical sub-committee adopt a new method of fiber determination which would be recommended as standard by the Technical Association to the exclusion of well-tried methods at present in use in these laboratories and apparently giving good results. It is not the purpose of the committee to develop new methods to supplant satisfactory methods now in use but rather to improve these older methods wherever possible and to test out new methods which may be proposed and make them available for use as supplementary methods, approved by the Association. To this end any member of the Association is invited to submit methods or ideas to the Committee for investigation and the Committee will attempt to check or develop such methods as may be required.

* Presented at the Sectional Meeting on Paper Testing, 1927 Annual Convention TAPPI.

Convention Echoes

"I want to congratulate you on the very excellent arrangements for the convention. It was the best I have ever attended. Professor G. L. Clark's talk on X-rays and Dr. Gerald Wendt's paper on recording acidity were the high lights in my estimation. I am sorry I did not get to see the demonstration of Sutermeister's stain. There was just too much for any one mortal to assimilate. You certainly did a good work."

Fibreboard Plant Resumes Operations

The plant of the International Fibreboard Company, Midland, Ont., which was visited by a serious fire in August of last year and has been closed down ever since, has resumed operations. The work of rebuilding was started a few weeks after the fire and followed by the installation of the necessary machinery. Rapid progress was made in reconstruction and the plant is employing 75 hands.

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Paper Making Industry

By Clarence J. West, Chairman

Cellulose Lignin

Wood Sulphite Tissue Paper as Material for Nitrocellulose for Celluloid. Katsumoto Atsuki and Masanori Ishihara. Cellulose. Ind. Tokyo 2, 175-179 (June, 1926). Tissue paper made from sulphite pulp purified by boiling with alkali and bleaching was compared with cotton tissue paper as a raw material for nitration. The sulphite paper contained 92.7 per cent of alphacellulose as against 98.8 per cent for the cotton paper; the sulphite paper was also denser and stronger than the cotton paper. When nitrated under similar conditions the relative viscosities of the nitrates in ether-alcohol were: sulphite paper 41.2, cotton paper 52.0, purified cotton wool 609. The beta- and gamma-celluloses present in the sulphite paper are nitrated and remain in the nitrocellulose; the nitrates of these lower celluloses are soluble in ether-alcohol and camphor-alcohol giving solutions of low viscosity. Their presence in the film or celluloid modify the gel-structure in the direction of discontinuity and the tensile strength and elongation are decreased. They do not adversely affect stability. There is no fundamental obstacle to the use of suitably purified sulphite pulp for the manufacture of celluloid; the alleged low yields of an industrial scale can probably be easily overcome by improvements in the quality of the paper and in the nitrating plant.—A.P.-C.

Determination of Lignin in Straw. S. Venkateswaran. J. Indian Chem. Soc. 2, 253-260 (1925). Before determining the lignin in straw it is necessary to extract the finely powdered substance for 3 to 4 hours with ether in order to remove all fats and resins. The absorption of phloroglucinol by straw is about 2.5 times as great as that of the lignin isolated from it. Experiments show that this difference is due to the presence of furfuraldehyde-yielding constituents in the straw and not to loss of lignin by decomposition during extraction. For the isolation and determination of lignin the following method is recommended: 1 g. of ether-extracted straw is hydrolyzed for 20 hours at room temperature with 15 cc. of 72 per cent sulphuric acid. The acid is diluted to 3 per cent concentration and the solution boiled under reflux for 1 hour. The lignin is filtered off, washed, dried at 105 degrees C., weighed and ignited. The hydrochloric acid method of hydrolysis, though satisfactory, is not so convenient as the sulphuric acid method, and Wenzl's method is unsatisfactory because the reagent attacks the lignin molecule.—A.P.-C.

Action of Highly Concentrated Hydrochloric Acid on Cellulose. K. Atsuki. Cellulose Ind. Tokyo 1, 53-61 (1925). Cotton cellulose was treated at 10 degrees C. with 100 times its weight of hydrochloric acid at 40, 41, 43, and 45 per cent strength, and the course of the hydrolysis was followed by measurements of viscosity and specific rotary power. The increase in rotation is more rapid the higher the concentration of the acid. The rotation-time curves show two points of inflection, the first after about 5 hours with 45 per cent acid or 10 hours with 40 per cent acid, and the second after 15 hours with 45 per cent acid or 30 hours with 40 per cent acid. The viscosity falls rapidly along the first step of the specific rotation curve and remains constant afterwards. The addition of 1 per cent of zinc chloride or 0.5 per cent of sodium chloride to the acid retards the solution of the cellulose and inhibits to some extent the hydrolysis. The addition of 0.5 per cent of calcium chloride suppresses the solvent action of the hydrochloric acid, the cellulose being disintegrated to a powdery form after a few days. The solution of cellulose is considered to take place by its association with the hydrochloric acid in virtue of its hydroxyl groups reacting as water so long as the concentration of the acid is such that it is still unsaturated with water of hydration; dispersion of the cellulose under these conditions is progressive. The end produce of the hydrolysis is dextrose, the intermediate products being colloids and then crystalloids in stages. By precipitation at an early stage after solution, the cellulose is obtained in a modified form which is very highly hydrated. It is physically unsuitable for nitration or acetylation, but can be centrifuged and converted into viscose.—A.P.-C.

The Action of Concentrated Sulphuric Acid on Cellulose and the Extraction of Cellulose from Wood with the Same Acid. Katsumoto Atsuki and Taizo Minaki. Cellulose Ind. Tokyo 2, 3-10 (Jan., 1926). The same method was used as for the investigation of the action of hydrochloric acid (preceding abstract). Sulphuric acid at a concentration of 64 per cent or higher exerts a solvent action on cellulose at ordinary temperature. As the concentration of the acid increases the rate of solution of cellulose increases also, and the resultant solution gives no precipitate of cellulose on dilution. When the concentration of the acid is greater than 85 per cent the cellulose has a tendency to char. The acid in which the cellulose dissolves without charring is of a hydrated form between $H_2SO_4 \cdot H_2O$ and $H_2SO_4 \cdot 3H_2O$. The process of the solution of cellulose is started by its hydroxyl groups combining with the sulphuric acid, followed by the swelling and peptization of the fibrous structure. The progress of solution and hydrolysis of cotton cellulose by 64 per cent and 69 per cent sulphuric acid at 3 degrees to 4 degrees C. and at 20 degrees C. was followed by measuring the specific rotation and the relative viscosity of the solution at hourly intervals after complete solution of the cellulose. The specific rotation increased with time, the rotation-time curve showing two points of inflexion, and the viscosity decreased rapidly until the first inflexion and then remained nearly constant. It seems that cellulose changes its colloidal nature in the first stage, and then decomposes chemically yielding crystalloids. Cotton cellulose was dissolved in 75 per cent, 70 per cent and 65 per cent sulphuric acid at 6 degrees C. at hourly intervals a portion of the solution was diluted with water, and the amount of precipitated cellulose and the copper number of the latter were determined: the decrease in the amount and the increase in the copper number of the precipitated cellulose proceed proportionally, and their rates are greater as the concentration of the acid and the temperature are higher. The extraction of cellulose from wood as a pure alpha-cellulose is effectively practiced by using a 64 to 66 per cent acid at 10 degrees to 15 degrees C. or a 66 to 70 per cent acid at 0 degrees to 10 degrees C. The wood must be reduced to a fine state, passing at least through the sieves of 64 to 120 meshes per square cm. The cellulose must be precipitated soon after solution, with water and under conditions which will avoid local heating. Using *Picea Ajanensis* (produced in Hokkaido) the composition of which was: total cellulose 58.03 per cent, alpha-cellulose 43.12 per cent, fat, wax and resin 2.40 per cent, furfural yield 6.02 per cent, mannan 5.31 per cent, galactan 0.34 per cent, lignin 31.49 per cent, the yield of extracted cellulose in one experiment was 45.2 per cent. The copper number was 1.30 per cent. The cellulose extracted contained no furfural and no ether-alcohol extract, but contained a trace of lignin in some cases. The cellulose was of a highly hydrated form, and when dried it became a hard horny mass, difficult to esterify in the usual manner. It is a colloidal modification of cellulose, the secondary combining bonds being loosened or opened. The combining point of the cellobiose residue by condensation, however, is very apt to be hydrolyzed, resulting in giving a cellodextrin or hydrocellulose. The extraction must therefore be controlled by adjust-

ing the concentration of acid, the reaction temperature and duration so as to obtain unmodified cellulose from non-alpha-cellulose. —A.P.-C.

Cellulose Esters of Higher Fatty Acids. G. Kita, T. Mazume, I. Sakurada and S. Nakajima. Cellulose Ind. Tokyo 1, 227-232 (Oct., 1925). Only a slight degree of esterification is obtained by heating cellulose with palmitic anhydride in the presence of pyridine and chloroform. On the other hand, when cellulose is heated with palmityl chloride and pyridine, preferably diluted with benzene, progressive formation of esters takes place, with the ultimate production of cellulose tripalmitate soluble in benzene and ether. The esters are purified by washing the product with alcohol and then extracting either ether or benzene. The monopalmitate is still fibrous and only slightly swollen; the higher palmitates, while retaining a fibrous structure, are very much swollen and completely deformed. The tripalmitate from hydrocellulose is completely soluble in ether, that from normal cellulose only partly soluble. The dipalmitate from hydrocellulose is soluble in benzene, but that from normal cellulose only partly. The monopalmitate is insoluble in benzene but becomes transparent in that liquid. The solutions from ether or benzene deposit elastic films. The melting points, ranging from 180 degrees to 220 degrees C. are lower in the esters from hydrocellulose than in those from normal cellulose. In the analysis by saponification, the addition of benzene to the alcoholic potassium hydroxide promotes the reaction.—A.P.-C.

Napthenic Acid Esters of Cellulose. G. Kita, T. Maxume, T. Nakashima and I. Sakurada. Cellulose Ind. Tokyo 2, 31-38 (Feb., 1926). Naphthenic acid fractions having acid values between 199 and 250, and prepared free from hydrocarbons by suitable treatment of petroleum fractions, were used in the forms of acid anhydrides and acid chlorides. Cellulose esters are obtained with the naphthenic acid anhydrides but the degree of esterification is low. With the acid chlorides in the presence of pyridine, esters containing up to 2.5 molecules of naphthenic acid to 1 molecule of cellulose are produced; unmodified cellulose reacts less readily than hydrocellulose. The esters resemble those produced with the higher fatty acids (preceding abstract); those with high naphthenic acid content show definite melting points. Naphthenic esters of unmodified cellulose are substantially insoluble, although a portion is soluble in benzene; the solubility depends not only on the naphthenic acid content, but also on the condition of the cellulose. The di-naphthenic ester prepared from hydrocellulose is completely soluble in benzene, chloroform, carbon tetrachloride, and ether. The originally insoluble ester also becomes soluble in these media after fusion. Naphthenic esters containing up to 1 molecule of naphthenic acid to 4 molecules of cellulose are obtained by treating alkali-cellulose with the acid chloride.—A.P.-C.

Comparison Between Bamboo Cellulose and Cotton Celulose. G. Kita and K. Azami. Cellulose Ind. Tokyo 1, 162-164 (1925). The maximum yield of cellulose octa-acetate by Klein's method obtained from bamboo cellulose prepared by chlorination was 70.82 per cent (melting point 220 degrees C.) corresponding with 33.84 per cent of cellobiose, after acetolysis for 7 days. The yield of cupric-reducing sugar obtained by Ost's method of total hydrolysis corresponded with 97.5 per cent of the theoretical value calculated as dextrose, and 90.4 per cent of the theoretical quantity of crystallized dextrose was recovered. Hence, the constitution of bamboo cellulose is similar to that of cotton cellulose.—A.P.-C.

Oxidation of Cellulose. H. Hibbert and J. L. Parsons Cellulosechemie 7, 97-110 (July 11, 1926). See Paper Trade J. 82, 215 (April 22, 1926).—J.L.P.

The Action of Oxygen on Alkali Cellulose. W. Weltzien and Gerhard. Papierfabr. 24, 413-414 (July 4, 1926). Cotton or artificial silk swollen by sodium hydroxide absorbs oxygen in large quantities at the ordinary temperature. Bleached cotton, mercerized with 10 per cent sodium hydroxide solution and pressed until its weight was about three times the weight of the untreated material, was placed in an apparatus filled with oxygen gas and heated in a thermostat to 60 degrees C. The rate of absorption was nearly constant even after 41 days, and the end-point of the reaction was not determined. Oxygen absorption increases with temperature elevation.—J.L.P.

The Problem of the Size of the Cellulose Molecule. H. Brunswig. Cellulosechemie 7, 118-121 (Aug. 8, 1926). The size of the cellulose molecule as represented by $C_6H_{10}O_5$ is insufficient to interpret the relations between nitrogen content and solubility of nitrocelluloses. The size of the molecule must be at least 4 times $C_6H_{10}O_5$ or $C_{24}H_{40}O_{20}$. This statement is based chiefly on the existence of a chemically uniform cellulose nitrate of 10.18 per cent nitrogen content, which is completely soluble in an ether-alcohol mixture. A diagram showing how the ether-alcohol solubility varies with the nitrogen content of nitrocelluloses, varying from 7 to 13 per cent, is shown.—J.L.P.

Investigations Relating to the Problem of the Alpha-Cellulose Determination. H. Bubeck. Papierfabr. 24, Festheft 66-71 (June 5, 1926). The maximum amount of a pulp is dissolved when, after mercerization in 17.5 per cent alkali solution, the mixture is diluted to 8-9 per cent (by volume) alkali solution. In the analytical determination of the alpha-cellulose content, the following definition of alpha-cellulose is proposed: the alpha-cellulose of a pulp is that portion, which after a 30 minute mercerization in a 17 per cent (by weight) solution of pure sodium hydroxide at 18 degrees C. is insoluble in 8-9 per cent (by volume) sodium hydroxide at room temperature (18-22 degrees C.). The maintaining of a definite mercerization temperature is necessary, since this factor had a profound influence on the alpha-cellulose value. Within the limits of 12-27 degrees C. the alpha-cellulose figure increases with temperature elevation. Brief differences in time are without influence. A 90 minute mercerization of a series of pulps showed a maximum difference of only 0.36 per cent compared to alpha-cellulose values obtained by a 30 minute mercerization.—J.L.P.

Alkali Soluble Cellulose. T. Lieser. Cellulosechemie, 7, 85-88 (June 6, 1926). So-called beta-cellulose, the constituent of pulp which is soluble in 17 per cent sodium hydroxide solution, is not a stable substance and films or threads manufactured from it are not durable. Beta-cellulose is related to such alkali-soluble celluloses, as the hydrocellulose of Knoevenagle and Busch, the cellulose A of Hess, and the phosphoric acid cellulose of Karrer and Lieser. These substances possess copper numbers (Schwalbe method) of approximately 13, 8, and 3, respectively. Cotton cellulose, purified according to Robinoff, when treated with highly concentrated hydrochloric acid at 0 degrees C., of the strength employed by Wellstaetter and Zechmeister for the isolation of lignin, yields a cellulosic decomposition product which is soluble in cold 8 per cent sodium hydroxide solution. This product had a copper number of 0.6. After the substance is dried, it does not completely dissolve in alkali, but swells. If the acid is allowed to act for a longer time on the cellulose, the resulting material after drying is soluble in sodium hydroxide solution and gave a copper number of 2.2. Films and threads produced from hydrochloric acid cellulose by the viscose process are inferior in quality, which is traceable to an irregular arrangement of the crystallites. The designation "cellulose A" of Hess for alkali-soluble cellulose is recommended. This is considered to be a mixture of pure cellulose of different degrees of decomposition. It is probable that the solution of such substances in sodium hydroxide depends on the formation of an addition compound with the alkali.—J.L.P.

The Esterfication of Alkali Cellulose. I. G. Kita, T. Mazume, T. Nakashima, and I. Sakrada. Cellulosechemie, 7, 125-130 (Sept. 5, 1926). Various conditions influencing the esterification of alkali cellulose, such as the purity and amount of the acid chloride used, the excess alkali, the temperature, and the age of the alkali cellulose, are studied. The degree of esterification with different acid chlorides depends on the nature of acid employed.—J.L.P.

Sodium Chlorides, Sodium Carbonate, and Ethyl Alcohol. G. Kita, T. Mazume, I. Sakrada, and T. Nakashima. Cellulosechemie, 7, 130-133 (Sept. 5, 1926). The presence of sodium chloride in alkali cellulose resulted in smaller yields of the ester. Sodium carbonate was without influence. In the presence of alcohol the alkali is absorbed both physically and chemically.—J.L.P.

The Isolation of Lignin by Means of Phosphoric and Hydrochloric Acids. H. Wenzl. Celluloschemie, 7, 88-89 (June 6, 1926). Polemic with H. Urban in Cellulosechemie, No. 5 (1926). Priority is claimed for the phosphoric-hydrochloric acid method of Urban. Lignin isolated by means of a zinc chloride-hydrochloric acid mixture is not pentosan-free; the phosphoric-hydrochloric acid method yields lignin free from pentosans.—H. Urban, Cellulosechemie, 7, 89 (June 6, 1926). Wenzl uses phosphorus pentoxide with hydrochloric acid (spec. grav. 1.19) while Urban employs 84 per cent phosphoric acid which produces a more mild reaction owing to the increased water content.—J.L.P.

Raw Materials

Constituents of Bamboo. K. Azami and S. Sengoku. Cellulose Ind. Tokyo 1, 157-161 (1925). Analysis of raw bamboo stems including knots showed for a one-year old stem: cellulose 51.7 per cent and lignin 25.05 per cent in the upper portion, 52.0 and 25.06 per cent in the middle, 52.0 and 29.22 per cent, respectively, in the lower portion. A three-year old stem showed similarly 52.15 and 26.05 per cent in the upper portion, 53.1 and 28.26 per cent in the middle, and 53.4 and 26.63 per cent in the lower. The figures are expressed on dry weights and those for cellulose on material previously extracted with benzene. Pentosan (xylan) ranged between 18 and 20 per cent. Values for ash ranged from 1.65 to 2.02 per cent; benzene extract from 0.19 to 0.55 per cent; alcohol extract, from 2.59 to 5.26 per cent, the values for these extracts being highest in the upper portion of three-year old stems. Pectin varied from 0.0008 to 0.0360 per cent and methyl value from 2.616 to 2.841 per cent.—A.P.-C.

Stipa Ichu Grass as a Paper Making Material. Merle B. Shaw and George W. Bicking. Paper Trade J. 83, 105-106 (Oct. 28, 1926). Cooking 5 hours at 325 degrees to 345 degrees F. and 110 to 115 pounds per square inch with 25 per cent of caustic soda gave 25.5 per cent of oven-dry pulp (based on air-dried grass), which could not be satisfactorily bleached with 12 per cent of bleaching powder. Cooking 7.5 hours at 325 degrees to 340 degrees F. and 115 to 130 pounds per square inch with 25 per cent of lime gave 56.8 per cent of an unbleachable pulp. The bursting and tensile strength of the soda pulp compares favorably with that of soda wood pulp, the tearing strength is somewhat lower, but the yield does not compare favorably with that of the commonly used paper making materials. The lime process gives a satisfactory yield but the bursting and tensile strengths of the paper are insufficient to meet the usual requirements. The pulp contains many shives which might have been removed by increasing the proportion of digesting material with consequent reduction in yield. The low yield, high chemical consumption and lack of strength make the material unpromising for paper making; but the soft bulky pulp might be used as a filler in admixture with stronger pulps.—A.P.-C.

Esparto Grass. L. Paoli. Papierfabr. 24, Festheft 110-111 (June 5, 1926). Esparto grass cultivation in northern Africa is discussed. Esparto fibers possess good felting properties and surpass other similar fibers as a filling material. Paper made from esparto is light, bulky, and is very absorbent towards printing ink.—J.L.P.

Banana Paper. T. Reifegerste. Wochbl. Papierfabr. 57, Sondernummer 73-75 (June 12, 1926). Paper made from banana tree waste (Musa Sapientum L.) such as leaves and stems, is not only very strong but is more or less impervious to water without a sizing treatment. The sheet is dark brown in color and is used as a substitute for kraft paper. The use of 2 per cent sodium carbonate instead of 5 per cent sodium hydroxide in the digestion process gives a less pure pulp but a higher yield. Bleaching is carried out with 5 per cent calcium hypochlorite, calculated on the weight of the pulp. Cost figures for the process are tabulated.—J.L.P.

Control of the Preparation of Wood in Pulp Manufacture. H. L. Joachim. Zellstoff u. Papier, 6, 346-347 (Aug., 1926). The necessity for controlling the size of the chips, weighing the wood, and obtaining the moisture content of a sample to completely control the preparation of the raw material and yield of pulp is pointed out. In the alkaline digestion process, small chips lead to a better recovery of the chemicals but adversely affect the pulp yield. The amounts of small and large chips should be reduced to a minimum for the most successful operation of a given digestion process.—J.L.P.

Regeneration of Old Printing Paper. H. Wenzl. Wochbl. Papierfabr. 57, Sondernummer 65-70 (June 12, 1926). A review of literature, essentially of patents, on the recovery of printing paper. The subject is treated under the following headings: (1) alkaline and mechanical treatments, (2) use of oxidizing agents, and (3) use of emulsifying agents.—J.L.P.

The Ageing of Plant Fibers. C. G. Schwalbe. Papierfabr. 24, Festheft 38-41 (June 5, 1926). The ageing of plant fibers may be divided into two parts: the ageing of the living fiber and the storage period of the fiber after the vitality of the protoplasm has ceased. Very young fibers are soft, pliant and capable of being highly swollen, and are not strong enough for many purposes. Old fibers become stiff and brittle. Prolonged drying of pulp wood brings about a contraction of the cell membranes and prevents the absorption of the cooking acid. Wood chips after a storage period of 10 years could not be cooked by the sulphite process. After the resins and fats in wood are extracted with benzol, the resulting deresinified and dehydrated material is practically incapable of digestion by the sulphite method. The extraction process has destroyed the swelling property of the fibers and desiccated them. Fresh wood is preferred to long stored wood for mechanical pulp. For steamed mechanical pulp, stored wood is preferable. The dryer the wood the more rapid and uniform will be the action of the steam. In the utilization of straw for pulp, long stored material possesses less absorptive power than fresh straw. Ageing affects the physical and chemical reactivity of wood fibers to a much greater degree than fibers free from such incrustations. The oven-drying of fibers is more harmful than a careful drying at low temperature. Fiber durability depends on the quality of the raw material, as well as on other factors such as sizing, etc. The addition of hygroscopic substances retards the ageing of paper fibers.—J.L.P.

Mechanical Process

Critical Considerations of Wood Grinders. F. Ruhlemann. Wochbl. Papierfabr. 57, 617-620 (May 29, 1926). A critical discussion concerning wood grinders.—J.L.P.

Considerations of the Grinder Process. Klimpke. Wochbl. Papierfabr. 57, Sondernummer 77-79 (June 12, 1926). The effective grinding surface of wood grinders, on the magazine of which a side pressure is exerted, is somewhat less than when no side pressure is exerted on the wood.—J.L.P.

The Practice of Groundwood Manufacture. E. Liebehen. Wochbl. Papierfabr. 57, 525-527 (May 8, 1926). The relative merits of two sharpening rolls for grinder stones are compared. The tearing length of paper is decreased considerably by sharpening the stone.—J.L.P.

Power Grinder for Groundwood Manufacture. G. Nenzel. Ger. pat. 407,961. Papierfabr. 24, 323 (May 23, 1926). Wood is fed to the grinder through a magazine by means of a screw-like device.—J.L.P.

Pulp Grinder Stones Consisting of Artificial Stone. H. Amos Ger. pat. 428,350. Papierfabr. 24, 359 (June 6); Wochbl. Papierfabr. 57, 723 (June 26, 1926). In the manufacture of groundwood pulp, the breaking of grinder stones, which consists of artificial stone, is prevented by a suitable mechanical arrangement.—J.L.P.

Magazine Grinder with Power-Driven Feeding Device. O. Andresen. U. S. pat. 1,591,801, July 6, 1926. In order to obtain an even continuous feed with an easily regulated pressure and to obviate the risk of vaulting in the magazine, one of the feeding devices is given such a form that its gripping members (spikes, teeth, etc.) move along a curve which at first cuts into the magazine at a comparatively large angle with the magazine wall and then gradually merges into the direction which is parallel or practically parallel with the magazine wall. The feeding device accordingly forms the bottom or a substantial part of the bottom of the magazine and carries the largest part of the weight of the log column. Preferably, this feeding device may consist of a rotating tooth or spike-drum or roll, but it may also be formed by chains moved over suitable guides. Further, in accordance with the invention, the magazine is located entirely on one side of a vertical plane through the shaft of the grinder, and the shaft of the tooth- or spike-drum is parallel to the grindstone axis approximately below the center of the upper surface of the magazine.—A.P.-C.

Sulphite Process

Method of Charging Pulp Digester. S. Svensson. U. S. pat. 1,593,147, July 20, 1926. According to the present invention a jet of steam is used for inserting the wood chips into the digester. The steam condenses in the digester and consequently no suction is required. An open cylinder with a flange at the top is introduced into the charging hole of the digester. On top of the flange is a circular steam pipe connected to a source of steam situated outside the digester. From the pipe a number of smaller pipes pass down through the flange and open out inside the cylinder at different levels. The lower parts of these pipes are bent in the same direction so that the jets of steam are directed slantingly downwards. The steam not only helps to place the chips, but effects a considerable saving in the time of steaming.—A.P.-C.

Report on the Disastrous Explosion at the Hoesh and Company Plant, Heidenau. Hoesch and Co. Papierfabr. 24, 284-285 (May 9, 1926); Wochbl. Papierfabr. 57, 527-528 (May 8, 1926). A brief report of a Mitscherlich digester explosion in Heidenau, Germany. The accident occurred during the preliminary cooking period. The digester pressure and temperature were 3.8 atmospheres and 95 degrees C., respectively. The digester had been in use for 25 years.—J.L.P.

Cooler for Hot Gases, Especially for Sulphur Dioxide Gases in Pulp Mills. H. Eberhardt. Ger. pat. 428,219. Papierfabr. 24, 324 (May 23); Wochbl. Papierfabr. 57, 723 (June 26, 1926). A gas cooler especially for sulphur dioxide is described.—J.L.P.

Liquor-Circulating System in Sulphite Cooking Processes. J. T. Jaeger. U. S. pat. 1,572,723, Feb. 9, 1926. The digester is filled with acid only to about three-quarters of its height, it is heated by introduction of steam at the bottom in the usual way, and at the same time a steam injector is provided which draws off the acid from the bottom of the digester and sprays it on top of the chips. This results in more rapid heating of the acid and more uniform action of acid on the chips, and it is claimed that the time of digestion can be appreciably reduced.—A.P.-C.

Pulping Liquor. G. A. Richter assignor to Brown Co. U. S. pat. 1,598,880, Sept. 7, 1926. The spent liquor from the alkaline digestion of unbleached pulp is treated with sulphur dioxide and the resulting acid liquor is then used to cook raw cellulosic material.—A.P.-C.

Process for Producing Sulphur Dioxide and Apparatus Therefor. H. O. C. Isenberg assignor to General Chemical Co. U. S. pat. 1,595,196, Aug. 10, 1926. A burner is fed with liquified sulphur by transferring upper layers of the supply to the burner and separation of impurities by the action of gravity is effected in the burner as well as in the supply. Separated impurities are withdrawn from time to time. An apparatus is described.—A.P.-C.

Process of Producing Sulphite Pulp. Aktieselkabet R. Pictet and F. Tharaldsen. Eng. pat. 252,344. In the preparation of wood pulp the duration of the process is reduced, the color of the product improved, and the yield increased by treating the raw material at 8 atmospheres' pressure and at a temperature not exceeding 110 degrees C. with a highly concentrated aqueous solution of sulphurous acid containing more than 100 grams of sulphur dioxide per liter. Under these conditions the process is completed in 8 to 16 hours. The digester is preferably first exhausted to remove air from the pores of the wood. The sulphur dioxide uncombined with the wood can be recovered, and, after purification, may be reabsorbed in water for subsequent treatments.—A.P.-C.

Sulphite Digester Liquors. G. A. Richter assignor to Brown Co. U. S. pat. 1,599,485, Sept. 14, 1926. Insoluble monosulphite is precipitated from digester relief liquor, without substantial precipitation of organic substances, e.g., by calcium carbonate, and the monosulphite is then converted into bisulphite by means of sulphur dioxide for recovery and use as cooking liquor.—A.P.-C.

Investigations on the Chemistry of the Sulphite Pulp Process. E. Haegglund. Papierfabr. 24, 449-450 (July 25), 483-488 (Aug. 8, 1926). During the first part of the sulphite process for pulp, the lignin is sulphonated but remains as an insoluble compound. By subsequent hydrolysis most of this compound is rendered water-soluble. "Overcooking" is apparently a condition which brings about an intramolecular change to form an insoluble and dark colored substance. In all unbleached sulphite pulp lignin is present as the insoluble lignosulphonic acid, to which compound is attributed the fluorescence effect observed after such a pulp is exposed to ultra-violet light. H ion concentration in sulphite liquor was determined satisfactorily by obtaining the reaction constant for the inversion of a sucrose sugar solution, and comparison of this value with those obtained by treating similar sugar solutions with hydrochloric acid solutions of known H ion concentrations. For calcium, magnesium, and ammonium sulphite cooking liquors, the pH in actual cooking operations generally increased from 1.9-2.0 after 6 hours, and decreased to 1.7-1.8 after 18 hours. The initial decrease in acidity was due to moisture in the wood. Experiments with these three cooking liquors showed that the free SO_2 was increased slightly during the cooking period, the amount of bisulphite gradually decreased, the loosely fixed SO_2 increased in a manner proportionate with the lignosulphonic acid in solution, and the sugar and pulp yields were approximately the same. The copper numbers of the pulps were in general higher at the beginning than at the end of the cook. The bromine numbers were identical for the calcium and magnesium solutions, but higher for the ammonium liquor. The strength properties of the pulps are plotted in a diagram.—J.L.P.

Temperature Schedule in Sulphite Pulping Process. W. H. Swanson. Paper Mill 49, No. 46, 6, 8 (Nov. 13, 1926); Paper Trade J. 83, No. 22, 46, 47 (Nov. 25, 1926). The important principles which have been established experimentally regarding the temperature schedule in the cooking of sulphite pulp may be summarized as follows: (1) The digester should be heated rapidly to the critical temperature, i.e., to the point at which the pulping action proceeds at an appreciable rate. For spruce that point is approximately 110 degrees C. and for hemlock about 120 degrees C. The rate of temperature rise to that point will be limited only by the time necessary to insure thorough penetration of the chips with the cooking liquor. (2) When the digester is operated at the pressures commonly used, temperatures in excess of 150 degrees C. are inadvisable owing to the low content of sulphurous acid left in the liquor above that point. (3) The maximum temperature should be as low as is consistent with the time available for cooking. (4) For high yields of strong bleached or unbleached pulp the temperature should be raised from the critical point to the maximum at a uniform rate or, preferably, allowed to follow an upward curve gradually increasing in steepness as the maximum is approached. (5) To obtain high yields of strong bleached pulp in limited time, the temperature should be raised to the maximum about 1.5 hours before the end of the cook. During the last 1.5 hours the maximum temperature should be maintained.—A.P.-C.

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A Confusion of Terms*

By William Morse Cole

To the accountant the difficulty which the average business man finds in interpreting financial statements is puzzling. Yet every accountant knows that a vast mass of misunderstanding follows the attempt to interpret accountants' figures, both as found on balance-sheets and on operating statements and income sheets. There is, of course, nothing intrinsically difficult about the meaning of accounting terms, if one knows enough about accounting processes to understand the fundamental relation between debit and credit and the significance of the two sides of a balance-sheet. In spite of this, however, we find constantly not only in the mind of the business man, but in the presentation of arguments before public-utility commissions and the courts, absolutely wrong interpretation of accounting figures, and even in the decisions of courts we find complete misunderstanding of the facts which the accounts show to a person versed in accounting practice. No term, probably, has led to more serious misunderstandings and to more unjust decisions of public-utility commissions and of courts than "reserve for depreciation." In one case[1] we find the item which appears upon the balance-sheet of a public-utility under the title "Reserve for depreciation" discussed by counsel in the case and even by the court in its decision as a "fund," an amount "invested," "charges," and "losses." It is obvious that this reserve for depreciation can not be all these things at once. The confusion in the minds of those handling the case is unquestionably due to the fact that accountants usually use in this relation a word that is in daily use in other matters than accounting, but use it in a sense which is purely technical and which departs somewhat from its significance in ordinary speech. The purpose of this article is to suggest the desirability in relation to the term "reserve," of remembering that the word carries to the non-accounting mind a connotation that such a mind finds difficulty in forgetting when the word appears in relation to accounting.

Reserve in Accounting

The word "reserve" in ordinary speech implies that something is held back or reserved for a future use or for permanent withholding. This, commonly, the accountant who uses the term in relation to depreciation will say is exactly how the word is used in accounting. That is what is now denied. The process of setting up a reserve for depreciation in accounting is, of course, to debit some account which indicates a cost, such as depreciation or depletion, or obsolescence, and to credit the reserve for depreciation. This credit is made in order to record on the books the fact that some of the assets must be reserved from distribution as profits lest the capital be impaired. The important fact to realize is that this reserve represents neither assets nor the source of assets. It represents nothing but an over-valuation of assets. Of course the logical thing is to write down the asset account as the asset which it represents suffers a shrinkage in valuation. Only because the accountant wishes usually to preserve the original figure of the cost of the asset does he resort to the device of crediting a reserve account instead of the original asset account. Since, then, the reserve for depreciation represents a hole, so to speak, in an asset, it does not represent anything like what in ordinary speech we mean by the term "reserve."

Cannot Reserve What Does Not Exist

It is absurd to talk about reserving a thing that does not exist. The "reserve" as it is commonly used in accounting does not represent a reservation of assets shown on the other side of the balance-sheet, for the assets so shown do not actually exist. The reserve as commonly shown registers the degree in which the assets shown on the other side of the balance-sheet fail to exist—the overvaluation of those assets. Consequently, to the extent of the reserve as shown by the account, it is impossible to reserve the items shown on the other side. One may reply that there are other assets to be reserved, and that this account is meant to suggest the need of reserving other assets in order to make good an overvaluation of the assets for which the reserve was set up. That, however, does not serve the purpose of making clear to the lay mind the fact that assets do not equal the total of the credit side of the balance-sheet, and when the balance-sheet is in balance with the item "reserve" on one side the lay mind assumes that assets must exist in amount equal to the total credit side of the sheet, for it would be absurd to talk of a reserve of a thing which did not exist to be reserved. The whole trouble lies in the fact, that the layman assumes that assets listed on the asset side of the balance-sheet exist as assets. Indeed, why should he not?

The practice of subtracting the so-called reserve, in short extension, from the gross value reported on the balance-sheet does not always remove the difficulty, for, since one can not reserve what does not exist, the layman still takes the balance-sheet to indicate the existence of the gross asset as given, and understands a part of that value to be merely reserved for a future purpose. Indeed, why should he not, when that is what in common speech we mean by a thing reserved? All accountants are familiar with stock or store records in which are found some items reserved for particular use. They are actually in existence, but unavailable for uses not previously designated.

Uses That Are Contradictory

Yet, as all persons familiar with accounts know, this same term "reserve" is used now and then by accountants to represent not

* From Journal of Accountancy.

[1] Michigan Public Utilities Commission vs. Michigan State Telephone Co., Michigan Supreme Court, Oct. 30, 1924.

a hole in the assets, an overvaluation, but an excess of assets over the claims to those assets as shown by the other items on the balance-sheet, that is, profits which for one reason or another the managers desire to reserve from distribution as dividends. These two uses of the word "reserve" are absolutely contradictory. One represents the fact that the assets shown on the balance-sheet do not, to the extent of the reserve, exist in reality, and the other shows that what we may call excess assets do exist and belong to the proprietors of the business, but are reserved from distribution for some purpose usually indicated in the title of the account, as reserve for expansion, reserve for pension funds, or even reserve for extraordinary depreciation, where profits are held back not because the managers believe the property has depreciated to the extent suggested by the reserve account but because they wish to be on the safe side and withhold from distribution as dividends profit believed to have been actually earned, so as to be ready for an emergency which may fall upon any business when extraordinary circumstances happen to bring heavy decline in values.

Thought Reserve Was an Asset

In the case of Michigan Public Utilities Commission v. Michigan State Telephone Company, cited previously in this article, the public-utility commission said that the depreciation reserve of $9,500,000 cost the company nothing, for it was derived from returns paid by users of its service. This implies that the commission thought that the reserve was an asset, in spite of its appearance on the credit side of the balance-sheet. The commission appears never to have realized that the reserve was nothing but a representation of the consumption of assets by the company in rendering service to its patrons—as much a consumption as the consumption of supplies, fuel, and cash in the payment of wages. It is not surprising that the commission took this attitude in view of the fact that the word "reserve" was used in that relation. In Montgomery's "AUDITING" we find in the same sentence[2] the term "reserve" in the sense of an over-valuation of assets and in the sense of surplus appropriated for future use and thus withheld from dividends:

"Therefore the only way to show the exact or as nearly exact as possible earnings is to carry a reserve for exhaustion account among the liabilities equal to 5 cents per ton, and a reserve for sinking fund account equal to an additional 5 cents per ton as a segregated part of surplus."

Reserve Used in Two Senses

Mr. Montgomery on the next page says that it is "settled practice" to use the term "reserve" in both senses. The regrettable thing is that the settled practice of accountants is actually so unsettling to laymen. Doubly unfortunate is it that, as Mr. Montgomery points out, sometimes the accountant uses the word "fund" or "reserve fund" for a reserve which is segregated surplus, whereas in common speech a fund is always an asset. Why should the accountant put to strange uses words that are in common speech when he can perfectly well use common words in common senses?

In a recent book called *Profits, Dividends and the Law*[3] we find in the same paragraph these two sentences: "Functional causes of depreciation. . .should not be taken into. . .the annual charge . . . which gives rise to a *valuation* reserve unless the effect of such causes can be intelligently foreseen;" and, " In providing reserves for mere contingencies the charge should be to undivided profits, giving rise to a *true reserve* of a proprietorship nature." (The italics are mine.) Note the effort to make clear the distinction.

In the October number of *THE JOURNAL OF ACCOUNTANCY*, in an editorial on page 285, are these words:

"Recently the credit men of banks have been thinking a good deal about the meaning of the language in which an accountant expresses his opinion of the conditions of a company or other business entity, and there seems to be a rapidly developing demand that the words used shall be so clear, so devoid of ambiguity, that the simplest reader would not be deceived."

Method of Making Distinction

Under present accounting practice one can not know whether a reserve represents the ownership of assets or the negation of assets. It is hard to conceive of any better confession that accounting terminology is seriously deficient than the use by an accountant of the same term for two things so contradictory. If it is desirable to distinguish between these two kinds of reserves, the question arises, as to the method of making that distinction. Some accountants use the term "reserve" for any over-valuation of assets, due to such things as depreciation, and use the term "surplus reserved" for reservations of profits as a means of providing for future needs through actual reservation of existing assets. This is vastly better than the failure to distinguish at all; but unless both terms appear on the balance-sheet at the same time, and possibly even then, the danger of a misunderstanding of the nature of the reserve for depreciation remains; for the man in the street naturally thinks that the total assets equal all the other items on the credit side plus the reserve.

Yet there is a word in ordinary speech which suggests exactly the idea which the accountant has in mind when he sets up a "reserve for depreciation." It is used in business and in other walks of life in exactly the sense that it is used by some accountants, namely, the word "allowance." That word is used universally except in accounting for the correction of exaggerations. We make allowances for exaggerations in peoples' stories, for valuations in the minds of the seller of goods when he must face a buyer's market, for the shrinkage in the value of products due to depreciation, for claims for loss and damage, etc., etc. The following sentences were taken from a newspaper report of a public-utility case and were written presumably by a reporter who was not versed in accounting terminology but was writing the language of the man in the street.

To Show Depreciation

CITY'S EXPERT INSISTS $11,000,000 A YEAR AMPLE ALLOWANCE

When the hearing was resumed yesterday by the public-service commission on the applications of the New York Telephone Company for increased rates, Manfred K. Toeppen, a consulting engineer who specializes in valuation problems of public utilities, one of the city's witnesses, was cross-examined by Frankland Briggs of counsel for the company. Last week Mr. Toeppen testified that the annual allowance for depreciation of the company's property in this city should not be more than $11,000,000. He explained that this figure was based on a study of the actual retirement of property from service since the company was organized. The company thinks it should be $15,000,000.

It will be observed that the reporter uses the word "allowance" in exactly the sense that most accountants use the term "reserve" when they are trying to record an over-valuation of property. Presumably, too, the writer of the headline was using the talk of the layman.

It is difficult to believe, if the word "allowance" were always used for the title of accounts intended to show over-valuations, that confusion in the mind of the layman would be so prevalent as today it is, and that any new misconceptions could be created by such adoption. The only reason that any one can desire to use, in accounting, terms of ordinary speech with extraordinary meanings is that he wishes to make accounting more incomprehensible or misleading. No reputable accountant has such a desire. It is easy, of course, to say that tradition or custom demands the use of the word "reserve" in the sense which is here objected to; but with every fondness for tradition and conservatism, one can not see why a term which actually results in confusion and serious misunderstanding should be be kept when a term which falls into ordinary speech and will serve the purpose equally well it so obviously available. Other terms than "allowance" may be just as

[2] Montgomery's Auditing Theory & Practice, 3rd edition, pages 285-286. Ronald Press Co.

[3] Profits, Dividends and the Law, by Prosper Reiter, Jr., pages 120-121. Ronald Press Co.

good, but they do not appear so obvious and presumably would not so readily remove the confusion which now is common.

A Third Need

A third need arises in a similar relation, namely, the need for a term to represent that which neither is an over-valuation of present assets nor a reservation of past profits. The best illustration of this is provision for income taxes to be levied on the income of one period and paid in a subsequent period. Such provision does not represent an over-valuation of assets, for the assets are still intact. It merely represents a claim to those assets on the part of the government. In one sense this provision is properly called a reserve, for it represents income or surplus reserved for the government. From the point of view of the owners of the business, however, it is not surplus but liability. To distinguish it, therefore, a third term is desirable. Again we ought to use the word which falls in with the speech of the layman. We commonly say that we have "provided" for certain things. If we wish on our balance-sheet to show that the government's share of our profits has been provided for, we may very well show on the credit side of the balance-sheet a provision for income taxes. This indicates that of the assets shown on the other side of the balance-sheet (which are in actual existence except for any allowances) a certain value is labeled as assignable to the claim of the government.

A similar use of the word "provision" would naturally cover expected losses or shrinkage of which past periods should bear a share, even though the assets have not yet actually shrunk. If, for instance, the buildings of a business are insured under policies which involved co-insurance, it is obvious that a fire would involve a loss not recoverable through the policies. The years when no fire occurs ought to bear a share of the losses actually incurred in other years, and the cost of insurance is not properly indicated if only the premiums actually paid are charged as operating costs. The setting up of a provision for fire loss is required by proper accounting methods in years when no losses occur. The natural credit for such entries is in an account which may be called "provision for fire loss." This indicates neither present shrinkage in assets nor profits reserved; it represents the fact that a part of present assets will under the law of averages need application in the future to offset losses actually to be suffered in the future, but chargeable to the present, and therefore that the proprietors' effective equity in the property is reduced.

Provisions Divided Into Two Classes

It may, indeed, be desirable to divide such provisions into two classes—one representing an expected future shrinkage in assets in which past periods must bear a share, as provision for fire losses, and the other representing liabilities that will be established in the future on operations of the past, as provision for income or other taxes. The first might be called a "provision," and the other an "estimated liability." The difference between these is not, however, fundamental, for the effect of both is to indicate that some of the assets shown on the balance-sheet, though not overvalued today, will ultimately be absorbed by exigencies originating in the past.

In summary, the argument is that balance-sheets will be much more intelligible if they contain terms in accordance with the practices of ordinary speech. The term "reserve" in common use in accounting confuses three things. These three things ought to be distinguished on a balance-sheet, and the following are recommended: the term "allowance" to indicate over-valuation, either from depreciation or from decline in value due to other causes; the term "surplus reserved" for appropriations of surplus for special purposes; and the term "provision" for a necessary record of the fact that, though assets are now in existence intact, either a claim will be later established against them by someone else or an inescapable shrinkage will be suffered in them (both really chargeable against past periods,) and that therefore the value of the owners' equity in the assets is really reduced below what it would appear to be without such record.

Good Will, Its Meaning and Application*

By Kenneth N. Parkinson

Among the various factors affecting the invested capital, of a going concern, no element is of perhaps greater importance, more frequently sought after, and the establishment thereof less understood than the element of goodwill. A review of the published decisions, wherein goodwill is a factor, would indicate that a large percentage of the cases are lost, and primarily for two reasons, first, because the meaning of the term itself was little understood, or second, that insufficient proof is afforded. The latter may be excusable, in that certain salient features may not be present and hence are incapable of presentation, but too frequently however, such lack is due to a failure to properly develop the subject. With the thought therefore, that a discussion of this subject may be of assistance to taxpayers and their counsel, this article is submitted.

Black's Cyclopedic Law Dictionary defines good will as follows:

"The benefit which arises from the establishment of particular trades or occupations. The advantage or benefit which is acquired by an establishment, beyond the mere value of the capital, stocks, funds, or property employed therein, in consequence of the general public patronage and encouragement which it receives from constant or habitual customers, on account of its local position, or common celebrity, or reputation for skill or affluence or punctuality, or from other accidental circumstances or necessities, or even from ancient partialities or prejudices. . . .It follows only that estimation and repute which is peculiar to the particular establishment. It is that species of connection in trade which induces customers to deal with a particular firm." (See also 12 R. C. L. 977).

Analyzing the above we might say that good will, is that benefit which arises, from the local position or general reputation of a particular establishment, for fair dealing, skill, affluence, or punctuality, and peculiar to that particular establishment. Clearly it is an asset, an intangible asset, but an asset nevertheless, and a productive one. It is that something which enables one individual with a reputation for skill and honesty, to borrow, whereas another, perhaps equally skillful and honest, is refused. In short it is the value, the benefit derived, from a good reputation.

Reputation an Important Factor

To possess a valuable reputation or good will one must be known which in turn is somewhat dependent upon one's location, as some locations are far more prolific for publicity than others. To establish a reputation, time is an important factor, affording proof of one's position. But while time, location, nature of business, etc., are all important factors, yet individually or collectively they must reflect a benefit, evidencing their value. As all businesses operate for profit, that benefit will be reflected in net income. This warning should be expressed, however, that net income alone does not establish good will. It is but the final link in the chain of evidence necessary, the proof of the pudding.

Webster defines good will as being "The advantage in trade which a business has beyond the mere value of what it sells."

The above definition, while brief, would apparently suffice were proper consideration given to its expression, "beyond the mere value of what it sells." In other words, it is quite possible for an

* From The National Income Tax Magazine.

article marketed to produce a high rate of income without the presence of goodwill as a factor. Goodwill may be and usually is something distinct from the article sold. It relates more to the reputation and standing of the firm, which reputation may be enhanced by the quality and nature of the article sold, but it is entirely possible that the one may exist without the other.

"A concern which enjoys a monopoly in its line cannot acquire a good will, and this is the reason usually given for not allowing for good will in public service property valuations. In estimating the value of the property of a public service corporation for the purpose of determining the reasonableness of the statutory price to be charged for its commodity, no allowance can be made for good will if the corporation has a monopoly of the business. but in all cases where competition exists good will is as important an asset of public utility company as of any other concern, and it has been pointed out that even in cases where competition does not exist, good will in the sense of favorable regard may be a valuable asset in fact if not in theory."—12 R. C. L. 982.

The above discussion is important, in that it establishes competition as a vital factor in determining whether or not the element of good will exists, or at least in determining even if good will does exist, without the presence of competition, whether or not it can be included in invested capital. In the latter situation income may be attributed solely to the commodity sold, in that either necessity compels its use to the exclusion of all others. or no other commodity will satisfy the economic desires. Where monopoly exists little consideration, if any, can be given to the skill or reputation, etc., of the corporate entity. In this connection virtual monopoly must be distinguished from actual legal monopoly, in that a virtual monopoly may result from a superiority of product, in which case good will may be a very vital factor.

While there are numerous other definitions of good will,, nevertheless, it is believed that the above are the most satisfactory, and are generally accepted. A summary of the essential factors mentioned therein for the establishment of good will, may be stated as follows: Local position or common celebrity, reputation for skill or affluence or punctuality, partialities, or prejudices, nature of business, time, competition, etc. Proof of the above may be evidenced by the benefits received, usually reflected in net income. The presence of these factors and a return of net income more than sufficient to show a fair return on the capital invested, has been generally accepted as convincing a proof of the presence of the good will factor, and A. R. M. 34 applied to determine the value of the good will present.

May Be Apart From a Tangible Asset

Good will may be something apart from a tangible asset. This fact has been recognized by the Board of Tax Appeals in its decision of the Appeal of Peverly Dairy Company, 1 B. T. A. 390, wherein the Board said:

"The basis of the taxpayers contention is that good will does not exist by itself and must be attached, or incident to something tangible, and can be sold only in connection with the thing to which it is attached. This is no doubt true when properly understood, but we think the taxpayers' conception of good will is too narrow. It is true that it can exist only as an incident of a business, but it is not necessary that it be connected with a place of business, or a particular article, although that is sometimes the fact. The old definition of goodwill as the probability that the old customers will resort to the 'old place' has long since been superseded and the term now includes all that good disposition of one's customers based upon reputation for skill, punctuality, or other incidental circumstances, which constitute the good reputation one enjoys in a particular business as an incident thereof. (12 R. C. L. 977.) In this sense it is attached to the business and it subject to sale as a part of the business. To say it must be attached to something tangible is to deny that good will can be acquired in the conduct of a retail dairy business where the delivery is to the customer. In such cases there is no place to which good will could attach, and if it arises at all it must be from the product or the service rendered, and we think where the business consists of service it is capable of sustaining good will as an incident. Good will is not something which can be delivered like merchandise, but as recognized in all the definitions, it is the probability or expectation of retaining the old customers and that probability or expectation is all a purchaser can acquire. Its value is problematical and the purchaser in this case realized that to such an extent that the amount he paid therefor was made to depend upon the number of customers obtained."

Not Easily Destroyed

Good will once established is not easily destroyed. Temporary financial distress alone is generally insufficient. In fact it is often during such periods of adversity that the value of goodwill asserts itself, just as the reputation of the individual often is the factor enabling him to overcome misfortune. (See discussion 12 R. C. L. 977.) A prolonged period of adversity, however, may tend to raise the question as to whether goodwill ever possessed a value, but a temporary period should have little if any effect. This fact is recognized by the Bureau of Internal Revenue, in A. R. M. 34. This memorandum provides for the attributing to good will a value based on the capitalization of earnings in excess of a fair return on the tangibles, the latter ranging from 8 per cent to 10 per cent, and intangibles being capitalized on a basis of from 15 per cent to 20 per cent.

A. R. M. 34 has been accepted and applied by the Board of Tax Appeals. (St. Louis Screw Co., 2 B. T. A. 649, and other cases.)

As suggested, temporary adversity may not have the effect of destroying good will. Fraud, or mismanagement may, however, have that effect, a fact which will appear evident, although the writer is unable at this writing, to cite any decision of the Board of Tax Appeals which would directly sustain that conclusion. It is the writer's opinion, however, that where loss or adversity is due to such elements, and these elements continue to hamper the progress of the business for any extensive period, that it might be a serious question as to whether goodwill may or may not have been destroyed. Public knowledge of this condition might prove a deciding factor in the controversy. (See decision in Carlisle Garment Company, decided March 31, 1926.)

The price at which stock is sold is fairly indicative not only of the earning power of the stock but of the reputation of the concern itself. That prime importance is attached to this conclusion is evident from even a hasty perusal of the decisions.

If before a petition is filed the taxpayer or his representative will ascertain whether or not these various factors are present and in what degree, the actual presentation will be materially simplified.

News Print Production in February

Production of news print in Canada during February 1927 amounted to 150,773 tons and shipments to 145,263 tons, according to the News Print Service Bureau. Production in the United States was 121,318 tons and shipments 119,076 tons, making a total United States and Canadian news print production of 272,091 tons and shipments of 264,339 tons. During February 14,297 tons of news print was made in Newfoundland and 1,077 tons in Mexico so that the total North American production for the month amounted to 287,465 tons.

The Canadian mills produced 37,146 tons more in the first two months of 1927 than in 1926, which was an increase of 13 per cent. The United States output was 12,618 tons or 5 per cent less than for the first two months of 1926, that in Newfoundland 5,258 tons or 20 per cent more, and in Mexico 273 tons or 14 per cent more, making a total North American increase of 30,059 tons or 5 per cent.

During February the Canadian mills operated at 86.3 per cent of rated capacity and the United States mills at 88.7 per cent. Stocks of news print paper at Canadian mills totalled 22,769 tons at the end of February and at United States mills 18,426 tons,

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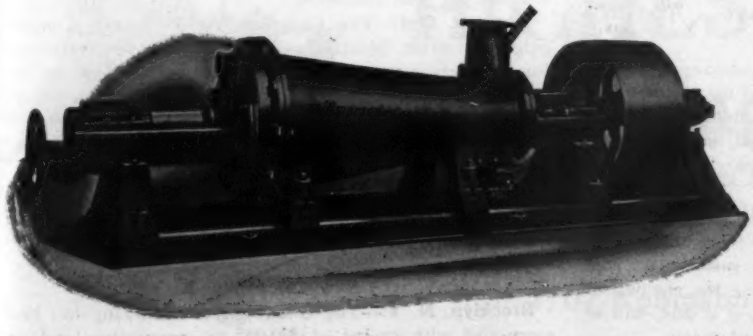

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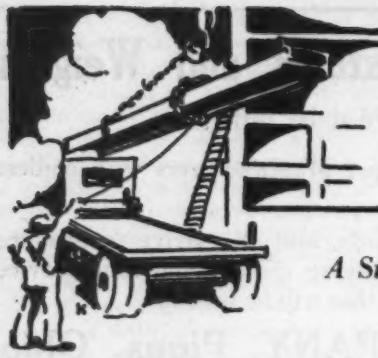


CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

West Natick, Mass.—The Dennison Manufacturing Company, Framingham, Mass., manufacturer of paper goods, has completed negotiations for the purchase of the former plant of the Northway Motor Company at West Natick, consisting of several buildings with gross floor area approximating 140,000 sq. ft. The new owner will remodel and improve the property, and plans to occupy at an early date; it will be used largely for storage and distributing service.

Lafayette, Ind.—The Haywood Tag Company has awarded a general building contract to A. E. Kemmer, Third and Brown streets, for the construction of its proposed new one-story and basement plant on local site. Miscellaneous contracts also are being let, including plumbing and heating, electric wiring, etc. The new factory will cost about $40,000. Walter Scholer, Painters & Decorators Building, is architect and engineer.

Baltimore, Md.—The Monumental Paper Company, 415 West Camden street, has arranged for the purchase of the four-story and basement building at 304 Hanover street, and will remodel and improve for early occupancy. It is understood that the structure will be equipped and used primarily for storage and distributing service.

New Haven, Conn.—The Walker-Rackliff Company, manufacturer of card stocks, office filing paper goods, etc., is understood to have filed plans for a proposed new addition to its plant at 19 Dickerman street, for which bids recently were asked. The estimated cost has not been announced. Frank Elwood, New Haven, is architect.

Cleveland, Ohio—The Pressman-Straus Bag Company, 2334 East 76th street, manufacturer of paper bags, etc., has asked bids on a general contract for the construction of a new factory, to be two-story and basement, 50 x 100 feet, reported to cost close to $50,000, with equipment. I. A. Wasserstrom, 10,323 Kempton avenue, Cleveland, is architect.

Philadelphia, Pa.—The Progress Paper Box Manufacturing Company, 631 North 13th street, has plans under way for the construction of a new addition to its plant to provide for considerable increase in present output. It is reported to cost more than $40,000, with equipment. Benjamin Shulman, 1722 Arch street, is architect.

Norwalk, Conn.—The C. F. Trowbridge Company is said to have plans under way for the early rebuilding of the portion of its three-story paper box manufacturing plant, destroyed by fire March 12, with loss estimated at close to $60,000, including equipment. The reconstruction is expected to cost close to a like amount.

Moss Point, Miss.—The Mississippi Paper Company is said to be arranging a general expansion program, to include the reforestation of property; about $25,000 will be expended in connection with this raw material work, comprising the planting of long leaf pine trees, etc. Increased operations, it is said, will be carried out in connection with present pulpwood supply.

New York, N. Y.—In connection with its proposed new paper box and carton manufacturing plant, the National Biscuit Company, 85 Ninth avenue, New York, is considering other sites than that offered by the City of Trenton, N. J., previously reported in these columns. The company is said to be looking over property at Perth Amboy and New Brunswick, N. J., and industrial committees from both of these cities have opened negotiations to secure the plant. The entire project is expected to cost more than $1,000,000, with machinery.

Wilmington, Del.—The Fibre Tube and Insulating Company, 103 West Third street, is reported to have work in progress on the reconstruction of the portion of its plant, recently damaged by fire, with loss approximating $35,000.

Eau Claire, Wis.—The Dells Paper and Pulp Company has received bids for the construction of the proposed new addition to its plant, as well as for the remodeling and improving of the present No. 1 mill, and will award contracts at an early date. The new structure will be two-story, brick, steel and reinforced-concrete estimated to cost close to $50,000.

Bastrop, La.—Following the recent purchase of the Louisiana Pulp & Paper Company, by Bond & Goodwin, Inc., 31 Pine street, New York, banker, the property has been transferred to the International Paper Company, 1 Pershirg Square, New York, which will operate in connection with its other plant in this section. The acquired mill has been used for the production of kraft papers and will be kept on this basis by the new owner, providing a total capacity of close to 300 tons of paper per day. It is understood that the mill was secured for a consideration of close to $8,000,000; it will be operated by the Southern International Paper Company, a subsidiary organization. Arrangements have recently been made for the purchase of a large tract of wood land in Pulaski, Grant and Saline Counties, Ark., totaling in all about 250,000 acres, to be developed for raw material supply. The company is reported to have plans for a new mill in the Bastrop district, to cost in excess of $3,000,00 with machinery.

West Palm Beach, Fla.—The Brown Company, Portland, Me., manufacturer of kraft and other papers, sulphite fiber, etc., is said to have plans under way for the construction of a new warehouse and shipping dock at West Palm Beach, and has made application for permission to proceed with the work. Estimated cost has not been announced.

Toronto, Ont.—The Canadian Paper Board Company, 2 Seigneurs street, Montreal, Que., is said to be perfecting plans for the early construction of its proposed new mill at Toronto, to be used for the production of cardboard, paperboard and kindred specialties. It is reported to cost more than $250,000. Kerry & Chace, Ltd., Confederation Life Building, Ontario, is engineer.

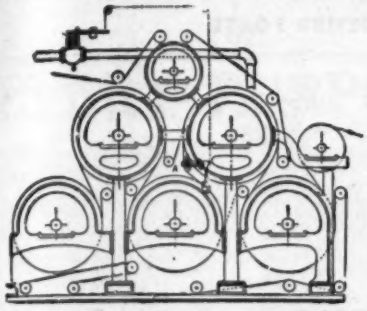
Montreal, Que.—The Abitibi Power and Paper Company, Ltd., operating paper mills and hydroelectric power plants in northern Ontario, has disposed of a note issue of $4,000,000, a portion of the fund to be used for general financing and expansion.

New Companies, Etc.

Brooklyn, N. Y.—The Giant Carton Company has been incorporated with capital of $20,000, to manufacture and deal in paper cartons, and other containers. The incorporators are D.

(*Continued on page 70*)

THE PICKLES DRYING REGULATOR



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By this process hitherto unattainable properties are given to paper

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WITHOUT DECREASING PRODUCTION

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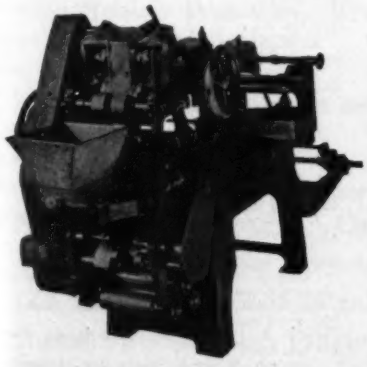

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A. L. PARRISH,

1702 Robinson St., South Bend, Ind.

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING MARCH 19, 1927

SUMMARY

Cigarette paper .....13 cs.
Wall paper .....189 bls., 8 cs.
Paper hangings .....6 crates, 20 bls., 4 cs.
News print .....1,183 rolls, 184 bls.
Printing paper .....12 rolls, 7 bls., 447 cs.
Wrapping paper .....3 rolls, 381 bls., 38 cs.
Decalcomania paper .....22 cs.
Gold coated paper .....6 cs.
Baryta coated paper .....50 cs.
Surface coated paper .....89 cs.
Colored paper .....1 cs.
Stencil paper .....26 cs.
Typon paper .....2 cs.
Filter paper .....55 bls., 10 cs.
Drawing paper .....9 cs.
Tissue paper .....10 cs.
Filtering pulp .....25 bls.
Flintstone paper .....10 bls.
Writing paper .....4 cs.
Wall board .....45 cs.
Envelopes .....2 cs.
Miscellaneous paper....1,262 rolls, 127 bls., 40 cs.

CIGARETTE PAPER

Max Spiegel & Son, La Bourdonnais, Bordeaux, 13 cs.

WALL PAPER

W. H. S. Lloyd & Co., Caronia, Liverpool, 4 bls.
F. J. Emmerich, Caronia, Liverpool, 9 bls., 1 cs.
A. C. Dodman, Jr., Inc., Minnekahda, London, 1 ble.
F. J. Emmerich, Minnekahda, London, 10 bls.
Keller-Dorian Paper Co., Aquitania, Southampton, 7 cs.
Rohner, Gehrig & Co., Arabic, Antwerp, 149 bls.
F. J. Emmerich, Cleveland, Hamburg, 14 bls.
J. E. Bernard & Co., Cleveland, Hamburg, 2 bls.

PAPER HANGINGS

A. C. Dodman, Jr., Inc., Caronia, Liverpool, 6 bls.
Whiting & Patterson Co., Inc., Aquitania, Southampton, 4 cs., 6 crates.
G. J. Hunken Co., Inc., Cleveland, Hamburg, 14 bls.

NEWS PRINT

Journal of Commerce, Korsholm, Helsingfors, 245 rolls.
Parsons & Whittemore, Inc., Bellbuckle, Hango, 382 rolls.
Parsons & Whittemore, Inc., Bremen, Bremen, 113 rolls.
M. Gottesman & Co., Inc., Drottningholm, Gothenburg, 301 rolls.
The Times Co., Drottningholm, Gothenburg, 80 rolls.
The Chatfield Co., Drottningholm, Gothenburg, 10 bls.
F. Henjes, Jr., Cleveland, Hamburg, 62 rolls.
E. Walker, Cleveland, Hamburg, 174 bls.

PRINTING PAPER

Maurice O'Meara Co., Bellbuckle, Hango, 309 cs.
Oxford University Press, Caronia, Liverpool, 5 cs.
Burroughs Wellcome & Co., Minnekahda, London, 7 cs.
Hudson Trading Co., Cleveland, Hamburg, 12 rolls.
Perkins, Goodwin & Co., Cleveland, Hamburg, 126 cs.
Schenckers, Inc., Pres. Wilson, Trieste, 7 bls.

WRAPPING PAPER

Wilkinson Bros. & Co., Inc., Drottningholm, Gothenburg, 27 cs.
W. Schall & Co., Drottningholm, Gothenburg, 381 bls.
F. C. Strype, Arabic, Antwerp, 9 cs., 3 rolls.
H. Reeve Angel & Co., Inc., Arabic, Antwerp, 2 cs.

DECALCOMANIA PAPER

L. A. Consmiller, G. Washington, Bremen, 12 cs.
C. W. Sellers, G. Washington, Bremen, 10 cs.

GOLD COATED PAPER

Richard Shipping Co., Bremen, Bremen, 6 cs.

BARYTA COATED PAPER

Globe Shipping Co., Bremen, Bremen, 13 cs.
Globe Shipping Co., G. Washington, Bremen, 37 cs.

SURFACE COATED PAPER

P. C. Zuhlke, Arabic, Antwerp, 27 cs.
Gevaert Co. of America, Arabic, Antwerp, 47 cs.
L. de Jonge & Co., Cleveland, Hamburg, 12 cs.
Whiting & Patterson Co., Inc., Cleveland, Hamburg, 3 cs.

COLORED PAPER

Harper & Bros., Bremen, Bremen, 1 cs.

STENCIL PAPER

Roneo, Ltd., American Farmer, London, 1 cs.
Arlac Dry Stencil Co., Cleveland, Hamburg, 25 cs.

TYPON PAPER

Globe Shipping Co., Aquitania, Southampton, 2 cs.

FILTER PAPER

Taiyo Trading Co., Havana Maru, Nagoya, 3 cs.
H. Reeve Angel & Co., Inc., Minnekahda, London, 7 cs.
A. Giese & Son, La Bourdonnais, Bordeaux, 55 bls.

DRAWING PAPER

H. Reeve Angel & Co., Inc., Minnekahda, London, 9 cs.

TISSUE PAPER

F. C. Strype, Caronia, Liverpool, 10 cs.

FILTERING PULP

F. Bing, Inc., Cleveland, Hamburg, 25 bls.

FLINTSTONE PAPER

United Hardware & Tool Co., Bremen, Bremen, 10 bls.

WRITING PAPER

F. L. Kramer & Co., Minnekahda, London, 4 cs.

WALL BOARD

O. M. Baxter, Inc., Drottningholm, Gothenburg, 45 cs.

ENVELOPES

Tice & Lynch, Tuscania, London, 2 cs.

MISCELLANEOUS PAPER

Steffens, Jones & Co., Korsholm, Gothenburg, 5 bls.
Tice & Lynch, Tuscania, London, 3 cs.
A. S. Zabriskie, Bremen, Bremen, 98 rolls.
J. J. Shore & Co., Bremen, Bremen, 10 cs.
Kolesch & Co., West Apaum, Rotterdam, 4 cs.
M. M. Cohen, Drottningholm, Gothenburg, 35 bls.
D. S. Walton & Co., Drottningholm, Gothenburg, 15 rolls.
Universal Paper Co., Drottningholm, Gothenburg, 78 bls., 74 rolls.
The Borregaard Co., Inc., Drottningholm, Gothenburg, 230 rolls, 161 bls.
Crepe Kraft Co., Drottningholm, Gothenburg, 3 bls., 59 rolls.
C. K. MacAlpine & Co., Drottningholm, Gothenburg, 86 rolls.
C. G. Winans, Drottningholm, Gothenburg, 6 bls., 786 rolls.
E. H. Sergeant & Co., Drottningholm, Gothenburg, 8 cs.
Cheramy, Inc., Aquitania, Southampton, 3 cs.
Keller-Dorian Paper Co., Aquitania, Southampton, 3 cs.
F. C. Strype, Arabic, Antwerp, 9 cs.

RAGS, BAGGINGS, ETC.

Chemical National Bank, Columbia, Trieste, 29 bls. rags.
The Barrett Co., Columbia, Trieste, 202 bls. rags.
Italian Bank, Columbia, Naples, 130 bls. rags.
F. Stern, Bremen, Bremen, 2 bls. rags.
E. J. Keller Co., Inc., West Apaum, Rotterdam, 42 bls. rags.
J. Cohen Son & Co., Caronia, Liverpool, 20 bls. rags.
B. D. Kaplan, Caronia, Liverpool, 7 bls. rags.
Mutnick Bros., Caronia, Liverpool, 9 bls. rags.
National Woolen Co., Caucasier, Antwerp, 6 bls. rags.
B. D. Kaplan Co., Caucasier, Antwerp, 3 bls. rags.
E. J. Keller Co., Inc., M. Arnus, Barcelona, 318 bls. rags.
S. Birkenstein & Sons, M. Arnus, Barcelona, 110 bls. rags.
E. F. Russ & Co., M. Arnus, Barcelona, 523 bags hide cuttings.
E. F. Russ & Co., M. Arnus, Barcelona, 238 bags pickers.
Sterling Mill Supply Co., M. Arnus, Barcelona, 50 bls. rags.
Castle & Overton, Inc., M. Arnus, Barcelona, 27 bls. rags.
Castle & Overton, Inc., M. Arnus, Barcelona, 260 bls. glue stock.
C. R. Spence, Archimedes, Manchester, 222 bls. rags.
Equitable Trust Co., Archimedes, Manchester, 225 bls. rags.
Chemical National Bank, Archimedes, Manchester, 25 bls. rags.
E. Butterworth & Co., Inc., Archimedes, Manchester, 49 bls. rags.
E. Butterworth & Co., Inc., Archimedes, Manchester, 218 bls. bagging.
R. F. Downing & Co., Archimedes, Manchester, 88 bls. rags.
E. J. Keller Co., Inc., La Bourdonnais, Casablanca, 121 bls. rags.
The Stone Bros. Co., Inc., Sacandaga, Antwerp, 20 bls. rags.
Equitable Trust Co., Sacandaga, Antwerp, 55 bls. rags.
Equitable Trust Co., Sacandaga, Antwerp, 37 bls. bagging.
Whaling Waste Products Co., Sacandaga, Antwerp, 62 bls. jute waste.
Bulkley, Dunton & Co., Sacandaga, ——, 64 bls. rags.
Chase National Bank, Cleveland, Hamburg, 147 bls. rags.
E. J. Keller Co., Inc., Cleveland, Hamburg, 69 bls. rags.
The Barrett Co., Cleveland, Hamburg, 544 bls. rags.
Bulkley, Dunton & Co., Cleveland, ——, 65 bls. jute waste.
J. Cohen Son & Co., Kyno, Hull, 120 bls. rags.
D. M. Hicks, Inc., Kyno, Hull, 47 bls. old canvas.
G. W. Millar & Co., Inc., Kyno, Hull, 319 bls. rags.
E. Butterworth & Co., Inc., Kyno, Hull, 173 bls. rags.
Italian Bank, Cabo Villano, Leghorn, 100 bls. rags.
E. J. Keller Co., Inc., Cabo Villano, Genoa, 89 bls. linen thread.
S. Birkenstein & Son, Cabo Villano, Barcelona, 82 bls. rags.
Bulkley, Dunton & Co., Talisman, ——, 78 bls. rags.
Bulkley, Dunton & Co., Westerdyk, ——, 10 bls. rags.
Castle & Overton, Inc., London Corp., England, 328 bls. rags.
E. J. Keller Co., Inc., Carenco, Oran, 6 bls. rags.
E. J. Keller Co., Inc., Missourian, Kobe, 150 bls. bagging.

OLD ROPE

Brown Bros. & Co., Isarco, Genoa, 230 coils.
N. E. Berzen, Cleveland, Hamburg, 70 coils.
E. J. Keller Co., Inc., Kyno, Hull, 193 coils.
G. W. Millar & Co., Inc., Kyno, Hull, 46 coils.
E. Butterworth & Co., Inc., Kyno, Hull, 61 coils.
Brown Bros. & Co., Cabo Villano, Huelva, 294 coils.

MANILA ROPE

Disbrow Cordage Co., West Apaum, Rotterdam, 131 pkgs.
Ellermans' Wilson Line, Minnekahda, London, 45 coils.
Burshell Co., Inc., Regina, Liverpool, 25 pkgs.
N. Y. P. R. S. S. Co., Regina, Liverpool, 50 coils.
N. E. Berzen, Cabo Ortegal, Vigo, 82 bls.
United Fibre Co., Sacandaga, Antwerp, 53 bls.

HEMP ROPE

National City Bank, Caronia, Liverpool, 139 pkgs.

SUNN ROPE

N. Y. Cordage Co., Arabic, Antwerp, 53 coils.

SISAL ROPE

N. Y. Cordage Co., Arabic, Antwerp, 37 coils.

CASEIN

Kalbfleisch Corp., Pan America, B. Aires, 1,660 bags.
M. H. Grace & Co., Pan America, B. Aires, 846 bags.
Atterbury Bros., Inc., Pan America, B. Aires, 834 bags.
Casein Manfg. Co., Satartia, B. Aires, 834 bags, 111,324 lbs.
T. M. Duche & Sons, Satartia, B. Aires, 2,751 bags, 165,060 kilos.
Crawford Hammond Co., Satartia, B. Aires, 834 bags, 50,034 kilos.

WOOD PULP

Guaranty Trust Co., Aspen, Gothenburg, 3,000 bls. sulphate pulp.
E. M. Sergeant & Co., Aspen, Gothenburg, 762 bls. sulphite pulp.
Bulkley, Dunton & Co., Korsholm, ——, 250 bls. kraft pulp.
J. Anderson & Co., Korsholm, Gothenburg, 250 bls. sulphite pulp.
E. M. Sergeant & Co., Korsholm, Gothenburg, 350 bls. sulphite pulp.
Castle & Overton, Inc., Innoko, Rotterdam, 757 bls. wood pulp.
Castle & Overton, Inc., Bremen, Bremen, 3,116 bls. wood pulp.
Castle & Overton, Inc., West Apaum, Rotterdam, 178 bls. wood pulp.
Johanson, Wales & Sparre, Inc., Drottningholm, Gothenburg, 691 bls. sulphate pulp.

(*Continued on page 66*)

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for
EVERY PURPOSE

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Stuff Chests, like those illustrated above, cylindrical chests, beater tubs, acid blow cases, alum tanks, etc., are a specialty with us. Let our engineers assist you in determining the type of construction and material best suited for your requirements. Our catalog containing a treatise on "The Effect of Chemical Solutions on Different Tank Woods" is yours for the asking.

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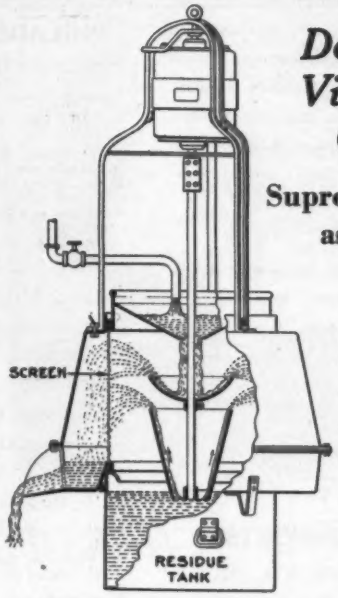

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SOLE AGENTS IN AMERICA FOR
ETTLINGEN MITSCHERLICH UNBLEACHED SULPHITE
ROSENBERGER BLEACHED SULPHITE
ZILINA BLEACHED SULPHITE
STAFFEL RAG PULP
BLEACHED AND UNBLEACHED

Imports of Paper and Paper Stock

(*Continued from page 64*)

Johanson, Wales & Sparre, Inc., Drottningholm, Gothenburg, 350 bls. sulphite pulp.
E. M. Sergeant & Co., Drottningholm, Gothenburg, 508 bls. sulphite.
Price & Pierce, Ltd., Drottningholm, Gothenburg, 600 bls. wood pulp.
Buck, Kiaer & Co., Inc., Topdalsfjord, Oslo, 2,500 bls. sulphite pulp.
J. Anderson & Co., Topdalsfjord, Sarpsborg, 840 bls. sulphite pulp.
Johanson, Wales & Sparre, Inc., Cleveland, Hamburg, 165 bls. wood pulp.

WOOD PULP WADDING

H. D. Catty & Co., West Apaum, Rotterdam, 102 bls., 5 tons.

WOOD FLOUR

Corn Exchange Natl. Bank, Korsholm, Hango, 3,720 bags.
National City Bank, Innoko, Rotterdam, 606 bags, 33,780 kilos.
F. B. Vandegrift & Co., West Apaum, Rotterdam, 400 bls., 20,300 kilos.
B. L. Soberski, Topdalsfjord, Frederickstad, 2,250 bags.

WOOD PULP BOARDS

Lagerloef Trading Co., Bellbuckle, Helsingfors, 183 bls., 47 tons.
Lagerloef Trading Co., Bremen, Bremen, 246 bls.
Steffens, Jones & Co., Drottningholm, Gothenburg, 10 bls.
Fibre Case & Novelty Co., Drottningholm, Gothenburg, 67 bls.

BALTIMORE IMPORTS

WEEK ENDING MARCH 19, 1927

Johanson, Wales & Sparre, Inc., Aspen, Gothenburg, 1,196 bls. dry soda pulp.
Johanson, Wales & Sparre, Inc., Aspen, Gothenburg, 700 bls. sulphite pulp.
E. M. Sergeant & Co., Aspen, Gothenburg, 604 bls. sulphite pulp.
E. M. Sergeant & Co., Aspen, Gothenburg, 1,196 bls. dry soda pulp.
Parsons & Whittemore, Inc., Aspen, Gothenburg, 1,200 bls. sulphite pulp.
Castle & Overton, Inc., Holstein, Germany, 2,696 bls. wood pulp.
Bulkley, Dunton & Co., Hannover, ——, 2,630 bls. wood pulp.
Bulkley, Dunton & Co., Milos, ——, 2,035 bls. wood pulp.
Bulkley, Dunton & Co., Modig, ——, 1,932 bls. wood pulp.
Bulkley, Dunton & Co., Western Ally, ——, 375 bls. wood pulp.
Bulkley, Dunton & Co., Blydendyk, ——, 214 bls. rags.
Bulkley, Dunton & Co., Lorain, ——, 84 bls. rags.

NORFOLK IMPORTS

WEEK ENDING MARCH 19, 1927

Lagerloef Trading Co., Bellbuckle, Helsingfors, 1,300 bls. sulphite pulp, 214 tons.
Lagerloef Trading Co., Bellbuckle, Helsingfors, 441 rolls wood pulp boards.
Lagerloef Trading Co., Bellbuckle, Hango, 52 bls., 242 rolls wood pulp boards.
E. J. Keller Co., Inc., Western Ally, Antwerp, 65 bls. rags.

PHILADELPHIA IMPORTS

WEEK ENDING MARCH 19, 1927

Price & Pierce, Ltd., Aspen, Gothenburg, 3,000 bls. wood pulp.
Bulkley, Dunton & Co., Innoko, ——, 11 bls. rags.
F. W. Winne Son, Inc., Innoko, Rotterdam, 182 pkgs. manila rope.
F. W. Winne Son, Inc., Innoko, Rotterdam, 190 pkgs. agave rope.
American Cotton Waste Co., Innoko, Rotterdam, 78 bls. rags.
E. J. Keller Co., Inc., Innoko, Rotterdam, 269 bls. rags.
Wolsey Import Co., Innoko, Rotterdam, 275 bls. rags.
A. Block & Co., Innoko, Rotterdam, 46 bls. rags.
Castle & Overton, Inc., West Apaum, Rotterdam, 302 bls. rags.
E. J. Keller Co., Inc., West Apaum, Rotterdam, 270 bls. rags.
S. E. Ingber Co., West Apaum, Rotterdam, 64 bls. rags.
D. I. Murphy, West Apaum, Rotterdam, 95 bls. rags.
American Exchange Irving Trust Co., Isarco, Leghorn, 144 bls. rags.
Phila. Girard Natl. Bank, Isarco, Naples, 35 bls. rags.
D. I. Murphy, Sacandaga, Antwerp, 136 bls. rags.
Castle & Overton, Inc., Sacandaga, Antwerp, 394 bls. rags.
M. Friedman, Sacandaga, Antwerp, 100 bls. rags.
S. E. Ingber Co., Sacandaga, Antwerp, 104 bls. rags.
E. J. Keller Co., Inc., Sacandaga, Antwerp, 37 bls. bagging.
V. Galaup, Cabo Villano, Leghorn, 112 bls. rags.
D. I. Murphy, Cabo Villano, Genoa, 71 bls. rags.
N. Y. Trust Co., Cabo Villano, Marseilles, 147 bls. old rope.
E. J. Keller Co., Inc., Cabo Villano, Barcelona, 104 bls. rags.
S. Birkenstein Sons, Cabo Villano, Valencia, 214 bls. rags.
E. J. Keller Co., Inc., Boschdyk, Rotterdam, 43 bls. old rope.
E. J. Keller Co., Inc., Boschdyk, Rotterdam, 374 bls. rags.
Castle & Overton, Inc., Oklahoma, France, 609 bls. rags.
Castle & Overton, Inc., Western Plains, Germany, 256 bls. rags.
Castle & Overton, Inc., London Commerce, London, 309 bls. rags.
Castle & Overton, Inc., West Harcuvar, Germany, 561 bls. rags.
Castle & Overton, Inc., Holstein, Germany, 2,425 bls. wood pulp.
Castle & Overton, Inc., Bellbuckle, Holland, 716 bls. wood pulp.
Bulkley, Dunton & Co., Blydendyk, ——, 7 bls. rags.
Bulkley, Dunton & Co., Grete, ——, 9 bls. rags.

GALVESTON IMPORTS

WEEK ENDING MARCH 19, 1927

Bulkley, Dunton & Co., Oakspring, ——, 342 bls. rags.

NEW ORLEANS IMPORTS

WEEK ENDING MARCH 19, 1927

Castle & Overton, Inc., Oakman, England, 300 bls. rags.
Castle & Overton, Inc., Cranford, France, 217 bls. rags.
E. J. Keller Co., Inc., Winston Salem, Antwerp, 112 bls. rags.

PORTLAND, ME., IMPORTS

WEEK ENDING MARCH 19, 1927

Waterfalls Paper Mills, Korsholm, Gothenburg, 5,750 bls. wood pulp.
The Borregaard Co., Inc., Korsholm, Gothenburg, 1,000 bls. wood pulp.

BOSTON IMPORTS

WEEK ENDING MARCH 19, 1927

J. Anderson & Co., Aspen, Gothenburg, 3,500 bls. sulphite pulp.
E. M. Sergeant & Co., Aspen, Gothenburg, 299 bls. dry soda pulp.
The Borregaard Co., Aspen, Gothenburg, 2,000 bls. wood pulp.
Baxter Level Paper Corp., Aspen, Gothenburg, 34 bls. paper.
Beech Nut Packing Co., Aspen, Gothenburg, 5 bls. paper.
T. D. Downing & Co., Aspen, Gothenburg, 141 bls. paper.
J. Anderson & Co., Korsholm, Gothenburg, 1,250 bls. sulphite pulp.
Parsons & Whittemore, Inc., Korsholm, Gothenburg, 150 bls. wood pulp.
The Borregaard Co., Inc., Korsholm, Gothenburg, 1,000 bls. wood pulp.
D. C. Andrews & Co., Bellbuckle, Helsingfors, 12 bls. tissue paper.
Brown Bros. & Co., Caronia, Liverpool, 10 bls. rags.
G. F. Malcolm, Caronia, Liverpool, 33 cs. tissue paper.
T. M. Duche & Sons, Satartia, B. Aires, 417 bags casein, 25,020 kilos.
Brown Bros. & Co., Kyno, Hull, 106 coils old rope.
Bulkley, Dunton & Co., Lorain, ——, 81 bls. rags.
Castle & Overton, Inc., West Arrow, Holland, 173 bls. wood pulp.
Moore & Munger, Suwarinco, Fowey, 466 tons 1 cwt. china clay.
English China Clays Sales Corp., Suwarinco, Fowey, 2,953 tons 6 cwt. china clay.
English China Clays Sales Corp., Suwarinco, Fowey, 1,751 casks china clay, 875 tons.
Papermakers Import Co., G. Allen, Fowey, 484 tons 4 cwt. china clay.
Atlantic National Bank, G. Allen, Fowey, 1,214 tons 10 cwt. china clay.
J. Richardson, G. Allen, Fowey, 1,067 tons 12 cwt. china clay.
J. Richardson, G. Allen, Fowey, 10 casks china clay, 5 tons.
L. A. Salomon & Bros., G. Allen, Fowey, 27 tons 12 cwt. china clay.

Oil Power Week April 18-23

Oil Power Week has been announced for April 18 to 23, 1927. under the auspices of the American Society of Mechanical Engineers, American Chemical Society, Local Sections; American Petroleum Institute, American Society of Naval Engineers, National Association of Stationary Engineers and the National Association of Practical Refrigerating Engineers.

By means of simultaneous meetings, discussions and publicity throughout the country during this week, it is purposed to focus general attention on the production of power by the use of oil. Meetings will be held in all leading centers throughout the United States, on the subjects of oil-engine fuels, engine design, operation, economics, trends, research problems, etc.

The National Committee in charge of Oil Power Week, announces that it will award a cash prize of one hundred dollars, accompanied by a suitable certificate, to be known as The Rudolph Diesel Award. The award will be made for the best contribution towards the advancement of oil engines, either in the form of a paper presented at one of the meetings throughout the country under the auspices of Oil Power Week, or a written discussion of a paper, by anyone attending any of the meetings.

Manuscripts should be in the hands of the National Committee not later than June 1, 1927, and the award will be announced by August 1.

All communications regarding this competition should be addressed to: Edgar J. Kates, chairman, National Committee, 29 West 39th street, New York.

The National Committee is composed of R. P. Anderson, D. L. Fagnan, J. D. Jones, D. H. Killeffer, L. H. Morrison, and L. H. Roller.

1864 1927

"EXCELSIOR" FELTS

for every grade of

PULP AND PAPER

We continue to maintain at the top the quality of Excelsior Felts, as we have done since we, as pioneers, made the first endless paper machine felts manufactured in America.

Seamless felts for fast running.
Satin Style felts for finish.
Special felts to meet every condition.
Send us your felt problems.

KNOX WOOLEN COMPANY
CAMDEN, MAINE

SOLD BY

BULKLEY, DUNTON & COMPANY
75-77 Duane St., N. Y., and direct

For Greater Economy
Without Sacrificing Quality

Use

ALPHA FIBRE

OUR new product which takes the place of rags in paper-making

Inquiries from the trade are welcomed.

BROWN COMPANY

founded 1852

PORTLAND MAINE

Mills at Berlin, New Hampshire

NEW YORK CITY
Woolworth Bldg.

CHICAGO
110 So. Dearborn St.

For reliable running and average long life

LINDSAY FOURDRINIER WIRES

are unsurpassed

We make them for the largest and fastest machines.

Cylinder Wires All Sizes

The Lindsay Wire Weaving Co.

Collinwood Sta. CLEVELAND, OHIO

WOOD PULP AGENTS

PRICE & PIERCE, Ltd.,

17 EAST 42ND ST.
NEW YORK

New York Market Review

Office of THE PAPER TRADE JOURNAL,
Wednesday, March 23, 1927.

Conditions in the local paper market are about normal for the time of the year and the demand for the various grades is fairly persistent. Prices are being well maintained, in most instances, although there have been some reports of shading on extra large orders. Reports from the sales organizations of the leading paper houses denote that the spring campaign is proving successful and a feeling of optimism prevails in most quarters.

Production of news print is still continuing along heavy lines and consumption appears to be increasing fast enough to absorb the greater output. Spot supplies, however, are reported to be more generous, although quotations are practically unchanged. According to reports from the leading publishers, circulation figures and advertising patronage continue to expand and confidence is expressed by most observers in the future trend of the news print market.

The various grades of paper board are in good request and the volume of inquiries being received for future business is encouraging. Prices rule steady to firm. Not much change has been reported in the fine paper market, while tissues are in fairly good demand. The coarse paper market is enjoying an excellent spring season and the demand for wrapping paper is holding up very well.

Mechanical Pulp

During the past week, trading in the ground wood market was mostly along routine lines and quotations on both imported and domestic mechanical pulp are practically unchanged. Offerings in the spot market are rather limited but there is a prospect of increased production now that the weather is becoming more favorable, and stocks should be more plentiful in the near future.

Chemical Pulp

Some weakness has developed in the chemical pulp market, especially in the sulphite pulp section. Trading during the past week was more active, and some good sized orders were booked at slightly lower prices. Imported bleached sulphite is now offered at from $3.70 to $4.50 and easy bleaching at from $3.15 to $3.35, ex dock, Atlantic ports. Kraft is quoted at from $2.70 to $3.40.

Old Rope and Bagging

Demand for imported and domestic old rope has improved somewhat. Supplies of domestic old rope are reported to be scarce and higher prices may be expected in the near future if the request from the paper mills expands to any great extent. The bagging market is also exhibiting strength and quotations are steady.

Rags

The higher grades of foreign rags are arousing more interest from the mills and prices are somewhat firmer. Accumulations are scarce, as importers have been loth to pay the high prices prevailing abroad for some time. The domestic rag situation is practically unchanged. Stocks in the hands of the dealers are not heavy, quotations maintained at previous quoted levels.

Waste Paper

No radical changes have transpired in the paper stock market. The higher grades are in slightly better demand, but the lower grades continue to exhibit weakness. There is a satisfactory demand for old kraft, and book stock is in excellent request.

Twine

The position of the twine market is unaltered and the trade is undoubtedly benefiting by the increased consumption of wrapping paper, due to spring and Easter requirements. The prices of the various grades are holding up very well at the levels which have prevailed for some little time past.

Paper Bag Jobbers Allege Monopoly

Paper bag and twine jobbers testified on Monday that they had been driven out of business by the Allied Paper Bag and Twine Jobbers' Association of Greater New York, Inc. They appeared at a hearing which Attorney General Albert Ottinger is conducting at 49 Chambers street into charges that the organization has violated the law prohibiting price fixing and combinations in restraint of trade.

The association was accused by witnesses of fixing prices and of preventing members who refused to abide by the schedule from obtaining goods. Former Congressman Isaac Siegel, counsel for the jobbers' organization, was permitted to be present while the witnesses were being questioned, but Anthony F. Ludden, the referee, ruled that he could have no part in the proceedings.

Eugene Solomon, of 417 East Eighty-fifth street, a dealer, said that he was called upon before the executive committee of the Allied Paper Bag and Twine Association and charged with selling paper too cheap. He said that when he refused to adopt the prices suggested by the committee they ordered him to stop selling to two of his largest customers and to increase his prices from 10 to 15 per cent to other customers.

Lazarus Solomon, a brother of the witness, corroborated his testimony. Some firms, he said, would accept orders over the telephone and neglect to fill them. He told of attending an executive meeting of the alleged paper bag trust, in the Community Building, at 163rd street and Southern Boulevard, the Bronx, and of being taken to task for "underselling the list prices and infringing on other jobbers' customers."

David Kasson, president of the Allied Paper Bag and Twine Association of Greater New York, was cited by witnesses as the man who decided who was to receive goods and who ruled on whether a firm could solicit customers.

Henry R. Miller, of 1483 Charlotte street, the Bronx, testified that he had been driven out of business by inability to purchase supplies when he refused to join the trust.

Isaac W. Harrowitz, secretary of the association, refused to waive immunity when placed on the stand. He testified that so far as he knew the association had neither by-laws nor constitution.

Isaac Siegel, of 217 Broadway, attorney for the accused bag manufacturers, read a statement embodying a general denial of the charges.

The wholesale and manufacturing companies cited to appear were: The Allied Paper Bag and Twine Jobbers Association, the Active Paper Company, Inc., the American Paper and Twine Company, the Amsterdam Paper Company, the Bronx Bag and Paper Company, Fair Deal Paper Company, Inc., Grand Bag and Paper Company, Inc., Globe Paper and Twine Company, West Side Paper Company, Weitzman & Sons Company, Inc., Jefferson Paper Company, Isador Melnick and the Gotham Tissue Corporation.

Paper Cutters
Single, Duplex and Diagonal

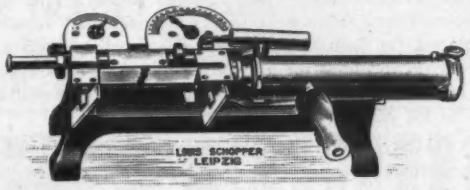
CUTTER KNIVES PATENT TOP SLITTER

HAMBLET MACHINE CO.
LAWRENCE MASS.

FOR STRENGTH AND STRETCH

SCHOPPER
RAPID PAPER TESTER

Accurately Gives Strength and Stretch of Any Kind of Paper



Invaluable to the Paper Maker in the Machine Room. Special Folder Giving Full Description for the Asking.

"Schopper" Micrometers, Tensile Testers, Folding Testers, Freeness Testers

The World's Standard Instruments

FOREIGN PAPER MILLS, INC.
72 DUANE ST. NEW YORK
Sole Agents for United States and Canada

SHIPPING INSURANCE
The Use of
ELIXMAN CORES

protects your rolls and insures their delivery to your customer in perfect condition. They eliminate claims for damages.

SHIPPING INSURANCE

Your two sources of supply are

Canadian Elixman Company
HAMILTON, ONTARIO

Elixman Paper Core Company
CORINTH, N. Y.

Steam leaks are coal leaks

That is what it really amounts to. Steam is coal, and coal is money.

The wise engineer pays as much attention to the selection of the packing as he pays to the selection of the highest priced equipment in the plant.

Jenkins Packings are the choice of engineers who buy packing on the basis of *service*. Regular users know from experience the long service they receive from Jenkins packed joints. They know that there's no cracking, crumbling or squeezing out at the joint. They know that frequent repacking is unnecessary.

Send for Jenkins Packing and Gasket folder.

Jenkins Packings include JENARCO, a red vulcanized packing for hot and cold water and saturated steam, JENKINS '96, a black unvulcanized packing for hot and cold water and saturated steam at all pressures, OILTITE, as its name implies for oil service, and COMPRESSED ASBESTOS JOINNTING for high pressure superheated steam.

JENKINS BROS.
80 White Street .....New York, N. Y.
524 Atlantic Avenue .....Boston, Mass.
133 No. Seventh Street ..Philadelphia, Pa.
646 Washington Boulevard ...Chicago, Ill.
JENKINS BROS., Limited
Montreal, Canada London, England

JENARCO Jenkins Packing
96 96 96 96 96 96 96

Miscellaneous Markets

Office of THE PAPER TRADE JOURNAL,
Wednesday, March 23, 1927.

During the past week, conditions in the local chemical market were practically unchanged. The demand from the paper mills is about normal for the time of the year, while a fair volume of inquiries are being received for future business. Contract withdrawals are being well maintained and shipments for March are expected to prove quite up to average. Prices are holding well up to schedule, in most instances, and there is little talk of concessions.

BLANC FIXE.—Most of the business transacted in the blanc fixe market during the past week was for immediate requirements. The demand for both the pulp and the powder is fairly active. Prices remain steady at the previously quoted levels. The pulp is selling at $60 per ton, in bulk, and the powder is offered at from 4 cents to 4¼ cents a pound, in barrels, at works.

BLEACHING POWDER.—The bleaching powder market continues to exhibit a strong tendency. Large shipments continue to go forward against contract. The schedule which has prevailed for some time is unchanged. Bleaching powder is quoted at from $2 to $2.40 per 100 pounds, in large drums, at works, according to quantity and grade.

CASEIN.—Demand for both domestic and imported casein appears to be improving and the recently advanced prices are being upheld. Imported casein is still selling at from 17 to 17½ cents a pound, while domestic casein is quoted at from 16½ cents to 18 cents a pound, all in bags, car lot quantities.

CAUSTIC SODA.—Production of caustic soda is being maintained at full capacity and the output is being readily absorbed by the consumers. The spot market has been fairly active of late and prices are holding up to previous levels. Caustic soda is quoted at from $3 to $3.10 per 100 pounds, in large drums, at works. Spot car lots are offered at $3.20 per 100 pounds.

CHINA CLAY.—Steadiness prevails in the china clay market. Contract withdrawals are moving in excellent volume. Prices remain unchanged. Domestic washed clay is quoted at from $8 to $9 a ton, at mine, and pulverized at $10 a ton. Imported china clay is quoted at from $15 to $25 a ton, in bulk, ship side.

CHLORINE.—The chlorine market coninues in a strong position. Production is proceeding in good capacity and, as the demand is heavy, there are no excess accumulations. The quotation on chlorine is still 4 cents a pound, in tanks or multi-unit cars, at works, on contract orders. The spot quotation is from 4¼ cents to 4½ cents a pound.

ROSIN.—Some improvement has been recorded in the rosin market and prices are somewhat firmer. At the naval stores, the grades of gum rosin used in the paper mills are now offered at from $11.75 to $12.75 per 280 pounds, ex dock, in barrels. Wood rosin is still selling at $9.50 per 280 pounds, at southern shipping points.

SALT CAKE.—Trading in the salt cake market during the past week continued along routine lines. Contract withdrawals are being well maintained and prices are holding up very well. Salt cake is still quoted at from $18 to $20 a ton, in bulk, at works. Chrome salt cake is offered at from $14 to $15 a ton.

SODA ASH.—Consumption of soda ash continues heavy and the manufacturers are encouraged to keep their plants running at practically full capacity. Shipments against contract are moving at an excellent pace. Prices are being maintained without much difficulty and shading is infrequent. Contract prices, in car lots, at works, are as follows: in bulk, $1.32½, and in barrels, $1.57½.

STARCH.—Paper makers' starch is in satisfactory demand and there are a good many inquiries in the market for future requirements. Quotations are being maintained at the same level which has prevailed for some time past. Special paper makers' starch is offered at $3.22 per 100 pounds, in bags, and at $3.39 per 100 pounds, in barrels.

SULPHATE OF ALUMINA.—While the sulphate of alumina market was rather quiet during the past week, this condition is plainly due to the fact that so many consumers had covered their requirements early in the year. The movement of supplies against contract continues normal. Commercial grades of sulphate of alumina are quoted at from $1.40 to $1.45, in bags, at works, in car lots. The iron free is selling at from $2 to $2.05 per 100 pounds at works.

SULPHUR.—Demand for sulphur was persistent during the past week. Contract withdrawals continue to move steadily into consumption. No radical price changes have been recorded for some time past. The grades of sulphur mostly used in the paper mills are still quoted at from $18 to $19 a ton, in bulk, at mine.

TALC.—Contract withdrawals of talc are moving in good volume and the tone of the market is strong. The demand for this product is steady and prices are being well maintained. American talc is quoted at from $16 to $18 a ton, at eastern mines. French talc is still selling at from $18 to $22 a ton, ship side.

CONSTRUCTION NEWS

(*Continued from page 62*)

Getz, B. Newman and F. Bortu. The company is represented by M. S. Yochelson, 320 Broadway, New York.

New York, N. Y.—The United Stationery Corporation has been incorporated with capital of $20,000, to manufacture and deal in writing and other paper products. The incorporators are M. Schier and A. Jacobs. The company is represented by H. L. Richer, 51 Chambers street, New York.

New York, N. Y.—J. J. Murphy Associates, Inc., has been incorporated with capital of $100,000, to manufacture paper specialties. The incorporators are J. J. Murphy and B. L. Miller. The company is represented by Miller & Miller, 25 West Forty-fourth street, New York.

Evansville, Ind.—The Tri-State Paper Company has filed notice of company dissolution.

Boston, Mass.—The Industrial Stationery Company has been incorporated with capital of $50,000, to manufacture and deal in paper stocks for office service, etc. The incorporators are M. V. Howley, James T. Howley, who will act as president; and Frank White, 121 Sagamore street, Chelsea, treasurer.

New York, N. Y.—The Commodore Paper Box Company has been incorporated with capital of $10,000, to manufacture and deal in paper boxes and containers. The incorporators are N. and B. Bladstein and A. Friedman. The company is represented by Ellman & Ellman, 80 Maiden Lane, New York.

Glastonbury, Conn.—The Naubuc Paper Company, Inc., has been incorporated with capital of $75,000, to manufacture paper products. The incorporators are R. O. Tuttle, Hartford; and E. M. and F. B. Clark, both of Glastonbury.

Munising, Mich.—The Munising Paper Company has filed notice of change in capital from $750,000 to $900,000, for expansion purposes.

Lansdowne, Pa.—The Mazer Paper Mills has been incorporated with capital of $30,000, to manufacture and deal in paper and paper products. J. M. Mazer, 4800 Pine street, Philadelphia, Pa., is treasurer.

New York, N. Y.—The Atlas Sample Card Company, 466 Broadway, has filed notice of increase in capital from $1500 to $10,000, for expansion.

Wood Pulp Prices Decline at Oslo

WASHINGTON, D. C., March 22, 1927.—Wood pulp prices on the Oslo market underwent a decline of from 3 to 10 cents per 100 pounds, according to a report from American Consul General Snyder to the Department of Commerce, which gives the following quotations as ruling on February 16: bleached sulphite, $3.55 to $4.19; easy bleaching, $2.97; strong, $2.80; easy bleaching sulphate, $3.14; strong, $2.85; all per 100 pounds. Mechanical ground wood, which was priced at $15 per ton during the latter half of January declined to $14 per ton.

GRIFFITH-HOPE

Dispensing Cabinets

AND

Fixtures

ARE

The STANDARD of the PAPER TRADE

For Towels, Toilet, Napkins, Etc.

GRIFFITH-HOPE CO., West Allis, Wisc.

Missisquoi Pulp and Paper Company

SHELDON SPRINGS VERMONT

White and Tinted Bristols—White Blanks—Index Bristol and Specialties in Card Boards

Clay

300 tons daily

AMERICAN MADE FOR AMERICAN TRADE

C. K. WILLIAMS & CO. ANCHOR BRAND DRY COLORS AND FILLERS EASTON, PA. U.S.A.

Red
Brown
Yellow
} Oxides

Talc
Yellow Ochres,
Umbers, Agalite

C. K. Williams & Company
EASTON, PA.

Some portion of our clay production is *pulverized.* That part of it which is *pulverized* is, as far as we know, the only *pulverized clay* which is washed and refined before being pulverized. This insures greater freedom from impurities you even considering this additional treatment.

Prices of M-E pulverized clay may surprise you even considering this additional treatment.

Let us submit sample and quote you.

THE

MINER-EDGAR CO.

110 William St.,
NEW YORK

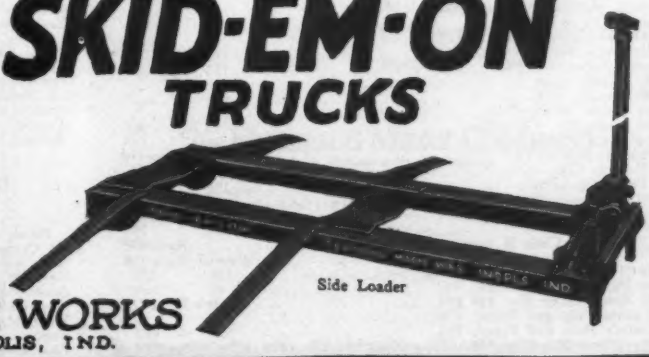
Bought one on trial -has since bought four

The Terre Haute Paper Co. purchased one of these trucks some time ago on trial and were so well pleased with the results that they have since purchased a supply for each of their four plants, and figure that they have saved a great amount of time and cost in handling paper stock.

They save their cost in damage to rolls. They insure perfect handling of stock and are saving money in many paper plants throughout the country. Many report a saving of over 25%.

Our thirty day free trial offer will convince you that you need them.

SKID-EM-ON TRUCKS



Side Loader

CENTRAL MACHINE WORKS
437 S. SENATE AVE., INDIANAPOLIS, IND.

Market Quotations

Quoted by Hepburn & Co., 74 Broadway, N. Y. City, to whom all inquiry for quotations on these or any other Securities is referred.

BONDS	BID	OFFERED
Advance Bag & Paper, 7s 1943	101	103*
A. P. W. Pulp & Power, 7s 1945	100	102
American Writing Paper, 6s 1947	79	82
Bastrap Pulp & Paper, 6½s 1940	100	103
British Columbia Pulp & Paper, 6s 1950	80	90*
Beaver Products Corp., 7½s 1942	106	109
Berkshire Hills Paper, 8s 1941	60	80
Brown Paper Co., 1st 5½s 1946	94	98
Bryant Paper Co., 6s 1942	98	102
Cape Breton Pulp & Paper, 6s 1932	101	103
Central Paper Serial 6, 6½s 1942	89	...
Champion Coated Paper, 6s 1926 to 1932	98	...
Champion Fibre, 8s 1930	100	...
Champion Paper Corp'n, 1st 6s 1945	94	97
Continental Paper Products, 6½s 1943	88	91½
Cornell Wood Prod., 7½s 1937	100	104*
Crown Willamette Paper, 6s 1951	97	101
Donnaconna Paper, 6s 1940	98	102
Della Paper & Pulp Serial, 6s 1926-38	*95	...
Eastern Mfg. Co., 7s 1938	90	93
Eddy Paper, 7½s 1931	99	102
Escanaba Paper Serial, 6s 1926-39	90	95
Filer Fibre Serial, 7s 1926-39	90	95
Fort Orange Paper, 7s 1942	95	100*
Fox River Paper, 7s 1931	99	...
Gair Co. (The Robt.), 7s 1937	104	106
Gilbert Paper Co., 6½s 1926-29	89	...
Hammermill Paper, 6s 1939	100	103*
Itaska Paper & Prairie River Power, J+5½s 1926-38	94	96*
Itaska Paper 1st, 6s 1933-38	96	98*
Kalamazoo Veg. Parchment, 6s 1938	98	...
Marinette & Menominee, 7½s 1936	101	...
Mead Pulp & Paper, 5% Notes, 1927-37	90	95
Menasha Printing & Carton, 6½s 1939	99½	...
Mengel Company, 7s 1926 to 1934	100*	102
Monroe Paper Products, 7½s 1932	96	...
Munising Paper, 6s 1927-36	96	100
Nekoosa Edwards, 1st Ref. 6s 1928 to 1942	96	99*
Orono Pulp & Paper, 6s 1943	98	...
Orono Pulp & Paper, 5s 1941	94	...
Oswego Falls Corp., 6s 1941	98	100*
Oxford Paper, 6s 1947	100	...
Paepcke Paper Mills, 7s 1930	99	None
Parsons Pulp & Lumber, 7s 1928	97	...
Parker Young Co., 6½s 1944	95	99
Paterson Parchment Paper, 6s 1938	100½	102
Penobscot Chemical Fibre, 6s 1942	98	...
Poland Paper, 7s 1930	98	...
Port Alfred Pulp, 6½s 1943	*96	...
Queens City Paper, 7s 1932	95	100*
Richardson Co., 6s 1938	100	...
Spanish River Pulp & Paper, 8s 1941	106	110
Stevens & Thompson Paper, 6s 1942	91	94
St. Anne Paper, 6½s 1946	95½	98*
St. Croix Paper, 5s 1926-37	95	98*
St. Regis Paper Serial, 6½s 1926-35	98½	...
Tait Paper & Color Industries, 6s 1934	90	...
Taggart Bros. Co., 6s 1944	90	94
Ticonderoga Pulp & Paper, 5s 1930	95	98
Ticonderoga Pulp & Paper, 6s 1940	98½	100*
Warren (The S. D.) Company, 6s 1945	98	101
Wotab Paper, 6½s 1943	102	...
Westfield River Paper, 7s 1926-43	Wanted	...
Whitaker Paper, 7s 1942	103	106
Witmer-Parsons Pulp & Lbr. (Units)	63	70

STOCKS	BID	ASKED
Advance Bag & Paper, 8% Pfd.	97	100*
British Columbia P. & P., Pfd.	55	...
Brompton Pulp & Paper, 8% Pfd.	93	98*
Brown Corpn., 7% Pfd.	97	100*
Champion Fibre, 7% Pfd.	99	103*
Consolidated Paper, Common	19	24*
Diem & Wing, 7% Cum. Pfd.	90	93*
Donnaconna Paper, Com.	55	60
Donnaconna Paper, Pfd.	95	100
Eastern Mfg. Co., 1st Pfd.	34	37
Great Northern Paper (new)	60	70
Hammermill Paper, 7% Pfd.	105	110
Hinde & Dauch, Com.	135	...
Hinde & Dauch, Pfd.	100	...
Marathon Paper Mills, Com.	125	...
Louis De Jonge Co., 7% Pfd.	93	96
Munissing Paper, Com.	10	15*
New York & Penna. Co.	Wanted	None Off.
Oxford Papers, Com.	102	...
Oxford Paper Co., Pfd.	100	105
Penobscot Chemical Fibre, Com.	65	75*
Richardson Co., 7% Pfd.	104	...
Rubberoid Company	73	77
Seaman Container, Class B (par $1)	1	None Off.
Seaman Paper Co.	Wanted	None Off.
St. Croix Paper	150	170
St. Regis Paper Co., 7% Cum. Pfd.	97	100
Westfield River Paper Co., 1st Pfd.	Wanted	None Off.
West Virginia Pulp and Paper, Com.	58	63
West Virginia Pulp and Paper, Pfd.	97	102
Whittaker Paper, 7% Cum. Pfd.	97	103

* Nominal.

Paper

(F. o. b. Mill)

Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@32.00
Superfine	14.00	@32.00
Tub sized	10.00	@15.00
Engine Sized	8.00	@11.00
News—		
Rolls, contract	3.25	@ —
Rolls, transient	3.25	@ 3.50
Sheets	3.65	@ 3.85
Side Runs	3.00	@ 3.75
Book, Cased—		
S. & S. C.	6.50	@ 8.00
M. F.	6.25	@ 7.75
Coated and Enamel	8.00	@15.00
Lithograph	8.00	@15.00
Tissues—Per Ream—		
White No. 1	.80	@ 1.00
Anti-Tarnish	1.10	@ 1.90
Colored	1.00	@ 2.00
White No. 2	.75	@ .85
Kraft	.90	@ 1.00
Manila	.75	@ .85
Kraft—		
No. 1 Domestic	6.25	@ 6.50
No. 2 Domestic	5.25	@ 5.50
Southern	4.75	@ 5.25
Imported	6.50	@ 7.00
Manila—		
No. 1 Jute	9.00	@ 9.25
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	3.75	@ 4.25
Fibre Papers—		
No. 1 Fibre	5.00	@ 5.50
No. 2 Fibre	4.75	@ 5.25
Common Bogus	2.75	@ 3.00
Screenings	3.00	@ 3.25
Card Middles	4.00	@ 5.00
Boards—per ton—		
News	42.50	@45.00
Straw	57.50	@60.00
Chip	40.00	@42.50
Binders' Boards	65.00	@70.00
Sgl. Mla. Ll. Chip	52.50	@55.00
Wood Pulp	67.50	@72.50
Container	60.00	@65.00
Glassine—		
Bleached, basis 25 lbs.	13.00	@16.00
Bleached, basis 20 lbs.	15.00	@16.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported—		
Moist	34.00	@36.00
Dry	36.00	@38.00
(F. o. b. Mill)		
No. 1 Domestic	27.00	@30.00
Screenings	15.00	@20.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	3.70	@ 4.50
Easy Bleaching	3.15	@ 3.35
No. 1 strong unbleached	2.75	@ 3.05
Mitscherlich unbleached	2.85	@ 3.40
No. 2 strong unbleached	2.70	@ 2.80
No. 1 Kraft	2.80	@ 3.05
Sulphate—		
Bleached	3.75	@ 4.00
(F. o. b. Pulp Mill)		
Sulphite (Domestic)—		
Bleached	3.65	@ 4.75
Easy Bleaching Sulphite	3.00	@ 3.25
News Sulphite	2.65	@ 2.85
Mitscherlich	3.25	@ 3.75
Kraft (Domestic)	2.70	@ 3.40
Soda Bleached	3.75	@ 4.00
Sulphate Screenings—		
Coarse	.75	@ .85
Refined	1.50	@ 1.85

Domestic Rags

New Rags

Prices to Mill f. o. b. N. Y.

Shirt Cuttings—		
New White, No. 1	11.50	@12.00
New White, No. 2	8.00	@ 8.50
Silesias No. 1	7.25	@ 7.75
New Unbleached	10.75	@11.25
Washables	4.25	@ 4.75
Fancy	5.25	@ 5.75
Blue Overall	7.25	@ 7.75
New Blue Prints	5.25	@ 5.50
New Soft Blacks	5.00	@ 5.50
Mixed Khaki Cuttings	4.50	@ 5.25
Pink Corset Cuttings	9.50	@10.00
O. D. Khaki Cuttings	5.25	@ 5.75
Men's Corduroy	4.00	@ 4.50
New Mixed Blacks	3.50	@ 3.75

Old Rags

White, No. 1—		
Repacked	5.50	@ 6.00
Miscellaneous	4.75	@ 5.25
White, No. 2—		
Repacked	3.25	@ 3.75
Miscellaneous	2.75	@ 3.00
St. Soiled, White	2.50	@ 2.75
Thirds and Blues—		
Repacked	2.25	@ 2.50
Miscellaneous	1.75	@ 2.00
Black Stockings	3.25	@ 3.75
Roofing Rags—		
Cloth Strippings	1.70	@ 1.80
No. 1	1.70	@ 1.80
No. 2	1.40	@ 1.50
No. 3	1.25	@ 1.35
No. 4	1.25	@ 1.35
No. 5A	.95	@ 1.05

Foreign Rags

New Light Silesias	7.00	@ 7.50
Light Flannelettes	7.50	@ 8.00
Unbleached Cottons	10.00	@11.00
New White Cuttings	10.50	@11.50
New Light Oxfords	7.00	@ 7.50
New Light Prints	5.50	@ 6.50
New Mixed Cuttings	3.00	@ 3.50
New Dark Cuttings	2.75	@ 3.25
No. 1 White Linens	7.00	@ 7.75
No. 2 White Linens	5.00	@ 5.50
No. 3 White Linens	4.00	@ 4.50
No. 4 White Linens	3.00	@ 3.50
Old Extra Light Prints	2.75	@ 3.25
Ord. Light Prints	2.25	@ 2.50
Med Light Prints	1.85	@ 2.10
Dutch Blue Cottons	2.25	@ 2.50
German Blue Linens	2.25	@ 2.50
German Blue Cottons	2.00	@ 2.25
Checks and Blues	1.75	@ 2.00
Lindsay Garments	1.80	@ 1.85
Dark Cottons	1.70	@ 1.75
Shoppery	1.55	@ 1.60
French Blues	2.25	@ 2.50

Old Rope and Bagging

Prices to Mill f. o. b. N. Y.

Gunny No. 1—		
Foreign	1.90	@ 2.00
Domestic	1.95	@ 2.05
Wool Tares, light	1.60	@ 1.70
Wool Tares heavy	1.60	@ 1.70
Bright bagging	1.50	@ 1.60
Small Mixed Rope	1.50	@ 1.65
Manila Rope—		
Foreign	3.50	@ 4.00
New Burlap Cut	3.00	@ 3.25
Hessian Jute Threads—		
Foreign	3.50	@ 4.00
Domestic	3.25	@ 3.50

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard, White, No. 1	3.50	@ 3.75
Hard, White, No. 2	3.15	@ 3.25
Soft, White, No. 1	2.90	@ 3.10
Flat Stock—		
Stitchless	1.25	@ 1.35
Overissue Mag.	1.25	@ 1.35
Solid Flat Book	1.15	@ 1.25
Crumpled No. 1	.80	@ .90
Solid Book Ledger	1.90	@ 2.10
Ledger Stock	1.50	@ 1.60
New B. B. Chips	.60	@ .70
Manilas—		
New Env. Cut	2.40	@ 2.60
New Cuttings	1.60	@ 1.85
Extra No. 1 old	1.25	@ 1.35
Print	.70	@ .75
Container Board	.60	@ .65
Bogus Wrapper	.75	@ .80
Old Kraft Machine Compressed bales	2.00	@ 2.15
News—		
No. 1 White News	1.50	@ 1.60
Strictly Overissue	.65	@ .75
Strictly Folded	.55	@ .60
No. 1 Mixed Paper	.40	@ .45
Common Paper	.27	@ .32

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News

Hanging

Specialties

Mill Supplies

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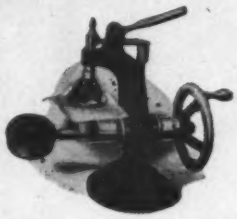

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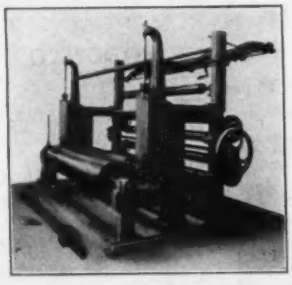
WALDRON

CENTENNIAL Waldron Machines ANNIVERSARY



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Factory—NEWARK, N. J.

Twines

F. o. b. Mill

Cotton—			
No. 1	.26	@	.27
No. 2	.24	@	.25
No. 3	.22	@	.23
B. C., 18 basis	.36	@	.38
A. B. Italian, 18 basis	.46	@	.51
Finished Jute—			
Dark 18 basis	.24	@	.25
Light 18 basis	.27	@	.28
Jute Wrapping, 3-6 Ply—			
No. 1	.21	@	.23
No. 2	.20	@	.22
Tube Rope—			
4-ply and larger	.18	@	.19
Fine Tube Yarn—			
5-ply and larger	.23	@	.27
4-ply	.24	@	.28
3-ply	.26	@	.30
Unfinished India—			
Basis	.16	@	.17
Paper Makers Twine Balls	.13	@	.15
Box Twine, 2-8 ply	.17	@	.19
Jute Rope	.21	@	.23
Ameri. Hemp, 6	.29	@	.31
Sisal Hay Rope—			
No. 1 Basis	.18	@	.20
No. 2 Basis	.16	@	.18
Sisal Lath Yarn—			
No. 1	.16	@	.18
No. 2	.14	@	.16
Manila Rope	.24	@	.26

CHICAGO

All Rag Bond	.35	@	.41
No. 1 Rag Bond	.25	@	.35
No. 2 Rag Bond	.14	@	.25
Water Marked Sulphite Bond	.09	@	.12
Sulphite Bond	.06¾	@	.11
Superfine writing	.18	@	.24
No. 1 fine writing	.14	@	.18
No. 2 fine writing	.12	@	.14
No. 3 fine writing	.08½	@	.12
No. 1 M. F. Book	.06½	@	.07¼
No. 2 M. F. Book	.05¾	@	.06¼
No. 1 S.&S.C. Book	.06¾	@	.07¾
No. 2 S.&S.C. Book	.05¾	@	.06½
Coated Book	.07½	@	.12
Coated Label	.07½	@	.10
News—Roll, mill	.03½	@	.04¼
News—Sheets, mill	.03¾	@	.04¾
No. 1 Manila	.04¼	@	.05¾
No. 1 Fibre	.04¾	@	.05¼
No. 2 Manila	.04¼	@	.04¾
Butcher's Manila	.04	@	.04½
No. 1 Kraft	.05¾	@	.06¼
Southern Kraft	.04½	@	.05
No. 2 Kraft	.05	@	.05¼
Wood Tag Boards	.04¼	@	.06¼
Sulphite Screenings	.03	@	.03¼
Manila Tissue—			
24x36 Sheet	.07	@	.07¾
White Tissue—			
20x30 sheet	.07¼	@	.07½
Boards, per ton—			
(Delivered Central Territory—			
Plain Chip	42.50	@	45.00
Solid News	45.00	@	47.50
Manila Line Chip	55.00	@	57.50
Container Lined—			
(Delivered Central Territory)—			
85 Test	65.00	@	70.00
100 Test	70.00	@	75.00

Old Papers

F. o. b. Chicago

Shavings—			
No. 1 Hard White	3.60	@	3.70
White Env. Cuttings	3.60	@	3.70
No. 1 Soft Shavings	2.90	@	3.00
No. 1 Mixed	1.35	@	1.45
No. 2 Mixed	1.05	@	1.10
Ledger & Writings	1.45	@	1.60
Solid Books	1.20	@	1.30
Blanks	1.65	@	1.75
Krafts	1.80	@	1.90
New Kraft Cuts	2.25	@	2.35
Manila Envelope Cuttings	2.00	@	2.10
Ex. No. 1 Manila	1.55	@	1.65
Print Manila	.75	@	.85
Folded News (overissue)	.75	@	.85
Old Newspapers—			
No. 1	.55	@	.60
No. 2	.55	@	.60
Mixed Papers—			
No. 1	.50	@	.55
Roofing Stocks—			
F. o. b. Chicago, net cash			
No. 1	30.00	@	—
No. 2	28.00	@	—

BOSTON

Paper

F. o. b. Mill

Ledgers—			
Sulphite	.07½	@	.15
Rag content	.15	@	.30
All rag	.38	@	.52½
Bonds—			
Sulphite	06½	@	.11½
Rag content	.15	@	.30
All rag	36½	@	.55
Writings	.07	@	.20
Superfines	.22	@	.50
News	.03½	@	.04
Book, Super	.07	@	.10
Book, M. F.	.06¼	@	.09¼
Book, Coated	.08½	@	.20
Coated Litho	.09	@	.12
Label	09½	@	.15
Jute Manila No. 1	.11	@	.13
Manila, Sul. No. 1	.04¾	@	.06½
Manila, Sul. No. 2	.03¾	@	.04½
No. 1 Kraft	.06	@	.06½
No. 2 Kraft	.05	@	.05¾
Common Bogus	.02¼	@	.02½
Delivered New England points			
Straw Board, rolls	.009		57.50
Straw Board in Sheets, basis 35s to 70s			53.50
Filled News Board			47.50
Chip Board			45.00
Single Manila Pulp lined board	55.00	@	60.00
Single White, patent coated board bender	75.00	@	80.00
Wood Pulp Board	80.00	@	85.00
Binder Boards	70.00	@	75.00
(F. o. b. Mills)			
Tarred Felts—			
Regular	61.00	@	63.00
Slaters	66.00	@	68.00
Best Tarred, 1 Ply roll	1.50	@	1.60
Best Tarred, 2 Ply, roll	1.70	@	1.80
Best Tarred, 3 Ply, roll	2.00	@	2.10

Old Papers

Shavings—			
No. 1 Hard White	3.25	@	3.75
White Blank News	1.50	@	1.60
Manila Env. Cuttings	2.00	@	2.25
No. 2 Hard White	3.00	@	3.25
No. 1 Soft White	.03	@	.03¼
No. 2 Soft White	02½	@	.03
No. 1 Mixed	1.10	@	1.15
No. 2 Mixed	.85	@	.90
Solid Ledger Stock	2.50	@	—
No. 1 Books, Heavy	1.10	@	1.20
No. 1 Books, Light	—	@	1.15
No. 1 New Manila	2.25	@	2.50
No. 1 Old Manila	1.50	@	1.75
Print Manila	.85	@	.95
Old Kraft	1.85	@	1.95
Overissue News	.65	@	.75
Old Newspapers	.60	@	.70
No. 1 Mixed Paper	.45	@	.52½
Box Board, Chip	.45	@	.60

Bagging

Price f. o. b. Boston

Gunny No. 1—			
Foreign	2.00	@	—
Domestic	2.00	@	—
Manila Rope—			
Foreign	3.50	@	4.00
Domestic	4.00	@	4.75
Mixed Rope	1.25	@	—
Scrap burlaps	1.35	@	—
Wool Tares, heavy	1.60	@	1.70
Mixed Strings	.90	@	1.20
New Burlap Cutting	2.15	@	2.25

Domestic Rags (New)

Price f. o. b. Boston

Shirt Cuttings—			
New White No. 1	.11½	@	.12
Silesias, No. 1	.07	@	—
New Unbleached	.10	@	—
Fancy	.05½	@	—
Washable	.04½	@	—
Cottons—According to Grades—Blue—			
Blue Overalls	07.	@	—
New Black, soft	3.50	@	4.00
Khaki Cuttings	.04½	@	.05½
Corduroy	.03½	@	.04
New Canvas	.09	@	.10

Domestic Rags (Old)

Price f. o. b. Boston

White No. 1	5.50	@	—
Repacked	6.25	@	6.50
Miscellaneous	5.00	@	—
White No. 2—			
Repacked	.04½	@	.05
Miscellaneous	.03½	@	.04
Thirds and Blues—			
Repacked	2.60	@	—
Miscellaneous	1.90	@	2.15
Roofing Stock—			
No. 1	1.65	@	—
No. 2	1.45	@	1.55
No. 3	1.15	@	1.25
No. 4	1.15	@	1.25

PHILADELPHIA

Paper

F. o. b. Mill

Bonds	.07	@	.40
Ledgers	.11	@	.40
Writings—			
Superfine	13	@	.18
Extra fine	—	@	.22
Fine	.20	@	.26½
Fine, No. 2	16	@	.25
Fine, No. 3	.12	@	.20
Book, M. F.	.06¾	@	.07
Book, S. S. & C.	.06	@	.07½
Book, Coated	.11	@	.16
Coated Lithograph	.09	@	.12
Label	.09	@	.12
News	.03¾	@	.04
No. 1 Jute Manila	.09½	@	—
Manila Sul., No. 1	.04½	@	.06
Manila, No. 2	.04	@	.04½
No. 2 Kraft	.05	@	.05¼
No. 1 Kraft	.06	@	.06¼
Common Bogus	.02¾	@	—
Straw Board	55.00	@	56.00
News Board	40.00	@	42.50
Chip Board	37.50	@	40.00
Wood Pulp Board	4.50	@	5.00
(Carload Lots)			
Binder Boards—			
No. 1, per ton	85.00	@	90.00
No. 2, per ton	70.00	@	75.00
Carload lots	60.00	@	65.00
Tarred Felts—			
Regular	66.00	@	58.00
Slaters	70.00	@	72.00
Best Tarred, 1-ply (per roll)	1.85	@	1.95
Best Tarred, 2-ply (per roll)	1.55	@	1.70
Best Tarred, 3-ply	2.10	@	2.15
No. 1 Mixed Paper	.65	@	.70

Domestic Rags (New)

Price to Mill, f. o. b. Phila.

Shirt Cuttings—			
New White, No. 1	.11½	@	.12
New White, No. 2	.07	@	.07½
Light Silesias	.07	@	.07½
Silesias, No. 1	.07½	@	.08
Black Silesia, soft)	.05	@	.05½
New Unbleached	.11	@	.11½
Washable	.05	@	.05¼
Fancy	.05½	@	.06
Cottons—according to grades—			
Blue Overall	.07½	@	.08
New Blue	.03½	@	.04
New Black Soft	.05½	@	.06
New Light Seconds	.03	@	.03½
Khaki Cuttings	.05	@	.05½
Corduroy	03½	@	.03¾
New Canvas	.08	@	.09
New Black Mixed	.05	@	.05½

Bagging

F. o. b. Phila

Gunny, No. 1—			
Foreign	3.50	@	4.00
Domestic	3.25	@	3.50
Manila Rope	4.25	@	4.50
Sisal Rope	1.25	@	2.00
Mixed Rope	1.25	@	1.50
Scrap Burlaps	2.00	@	2.25
Wool Tares, heavy	2.00	@	2.25
Mixed Strings	1.75	@	2.00
No. 1, New Light Burlap	3.25	@	3.50
New Burlap Cuttings	3.25	@	3.50

Old Papers

F. o. b. Phila.

Shavings—			
No. 1 Hard White	3.50	@	3.60
No. 2 Hard White	3.00	@	3.25
No. 1 Soft White	2.80	@	2.90
No. 2 Soft White	1.90	@	2.00
No. 1 Mixed	1.50	@	1.60
No. 2 Mixed	.90	@	1.00
Solid Ledger Stock	1.90	@	2.00
Writing Paper	1.65	@	1.75
No. 1 Books, heavy	1.15	@	1.20
No. 2 Books, light	.80	@	.85
No. 1 New Manila	2.40	@	2.50
No. 1 Old Manila	1.50	@	1.60
Print Manila	1.00	@	1.10
Container Manila	.90	@	1.00
Old Kraft	2.00	@	2.20
Common Paper	.50	@	.60
No. 1 Mixed Paper	.60	@	.70
Straw Board, Chip	.75	@	.80
Binders Board, Chip	.75	@	.80
Overissue News	.80	@	.90
Old Newspaper	.60	@	.70

Domestic Rags (Old)

White, No. 1—			
Repacked	5.00	@	5.25
Miscellaneous	4.75	@	5.00
White, No. 2—			
Repacked	.03½	@	.04
Miscellaneous	.02	@	.02¼
Thirds and Blues—			
Repacked	2.50	@	2.75
Miscellaneous	1.75	@	2.00
Black Stockings	3.25	@	3.50
Roofing Stock—			
No. 1	1.55	@	1.65
No. 2	1.40	@	1.50
No. 3	1.25	@	1.35
No. 4	1.20	@	1.30
No. 5A	.90	@	1.00
B	.80	@	.90
C	.80	@	.90

TORONTO

Paper

F. o. b. Mill

Bond—			
No. 1 Sulphite	.12½	@	—
No. 2 Sulphite	.10¾	@	—
No. 1 Colored	.13½	@	—
No. 2 Colored	.11¼	@	—
Ledgers (sulphite)	—	@	—
Ledgers, No. 1	.36	@	—
Ledgers, No. 2	.27	@	—
Writing	.09½	@	.10
News f. o. b. Mills—			
Rolls (Carloads)	3.25	@	—
Sheet (carload)	3.75	@	—
Sheets (2 tons or over)	4.00	@	—
Book—			
No. 1 M. F. (carLoads	7.75	@	—
No. 2 M. F. (carloads	7.50	@	—
No. 3 M. F. (carloads)	7.25	@	—
No. 1 S. C. (carloads)	8.25	@	—
No. 2 S. C. (carloads)	8.00	@	—
No. 3 S. C. (carloads)	7.75	@	—
No. 1 Coated and litho	14.50	@	—
No. 2 Coated and litho	13.50	@	—
No. 3 Coated and litho	12.75	@	—
Coated tinted	.15	@	—
Wrapping—			
Rag Brown	4.85	@	—
White Rag	5.25	@	—
"B" Manila	5.65	@	—
No. 1 Manila	6.65	@	—
Fiber	6.65	@	—
Kraft, M. F.	7.20	@	—
M. G.	7.35	@	—

Pulp

(F. o. b. Mill)

Ground wood	29.00	@	30.00
Sulphite easy bleaching	60.00	@	65.00
Sulphite news grade	55.00	@	60.00
Sulphite, bleached	80.00	@	—
Sulphate	65.00	@	—

Old Waste Paper

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut.	3.50	@	—
Soft White Book Shavings	1.00	@	—
White Blk., News.	1.50	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.25	@	—
Light and Crumpled Book Stock.	1.10	@	—
Ledgers and Writings	1.40	@	—
Solid Ledgers	1.40	@	—
Manilas—			
New Manila Cut	1.50	@	—
Printed Manilas	1.00	@	—
Kraft	2.25	@	—
News and Scrap—			
Strictly Overissue	.80	@	—
Folded News	.80	@	—
No. 1 Mixed Papers	.60	@	—

Domestic Rags

(Price to mills, f. o. b. Toronto)

No. 1 White Shirt Cuttings	11	@	.11½
Fancy Shirt Cuttings	.05	@	.05¼